FIG. 1A

RT-PCR for CCR5 gene

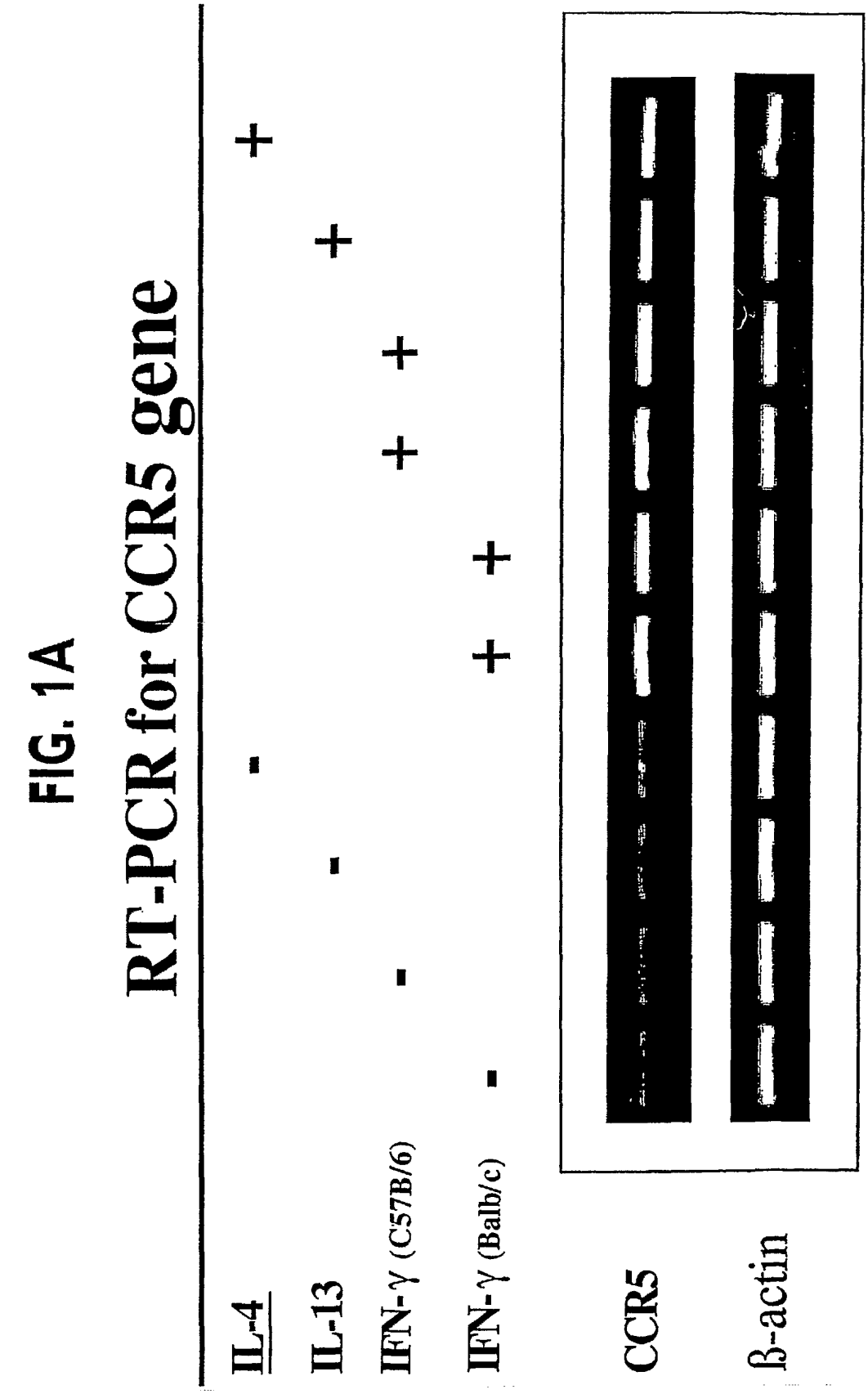


FIG. 1B

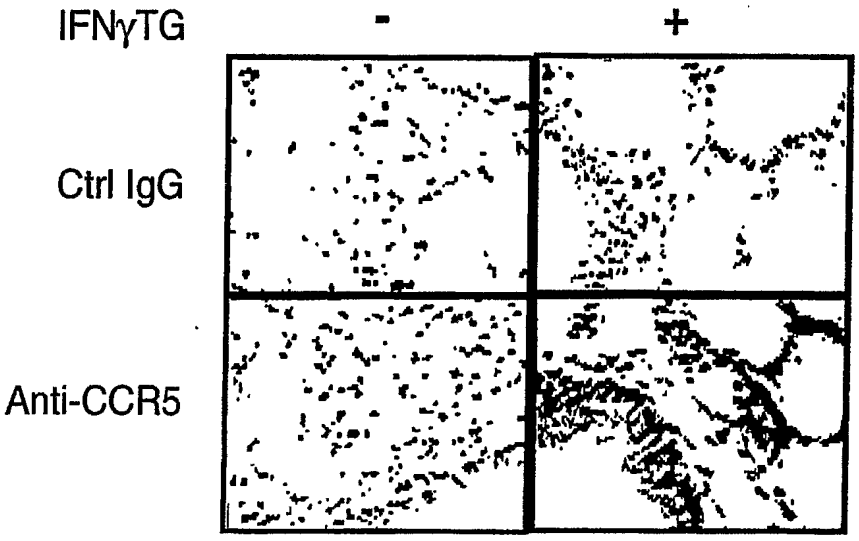


FIG. 2A

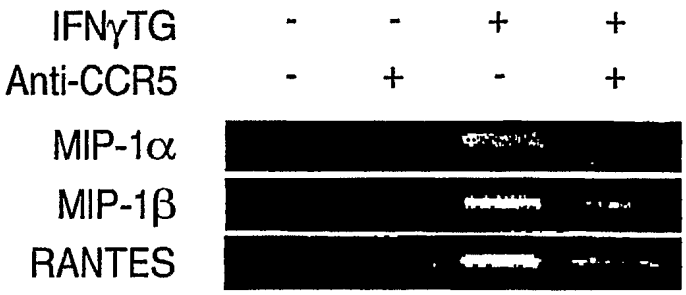
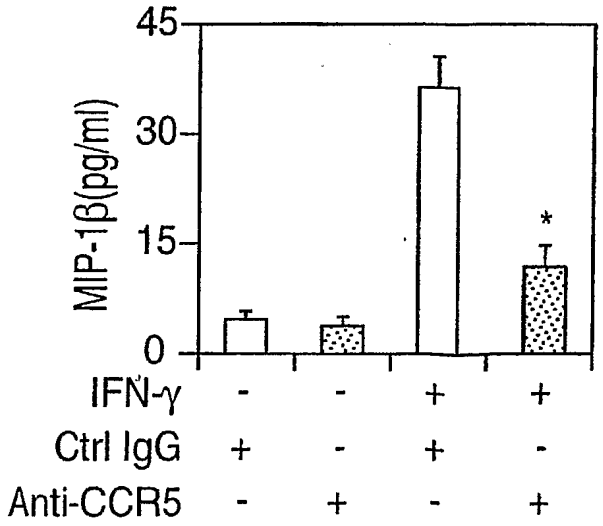
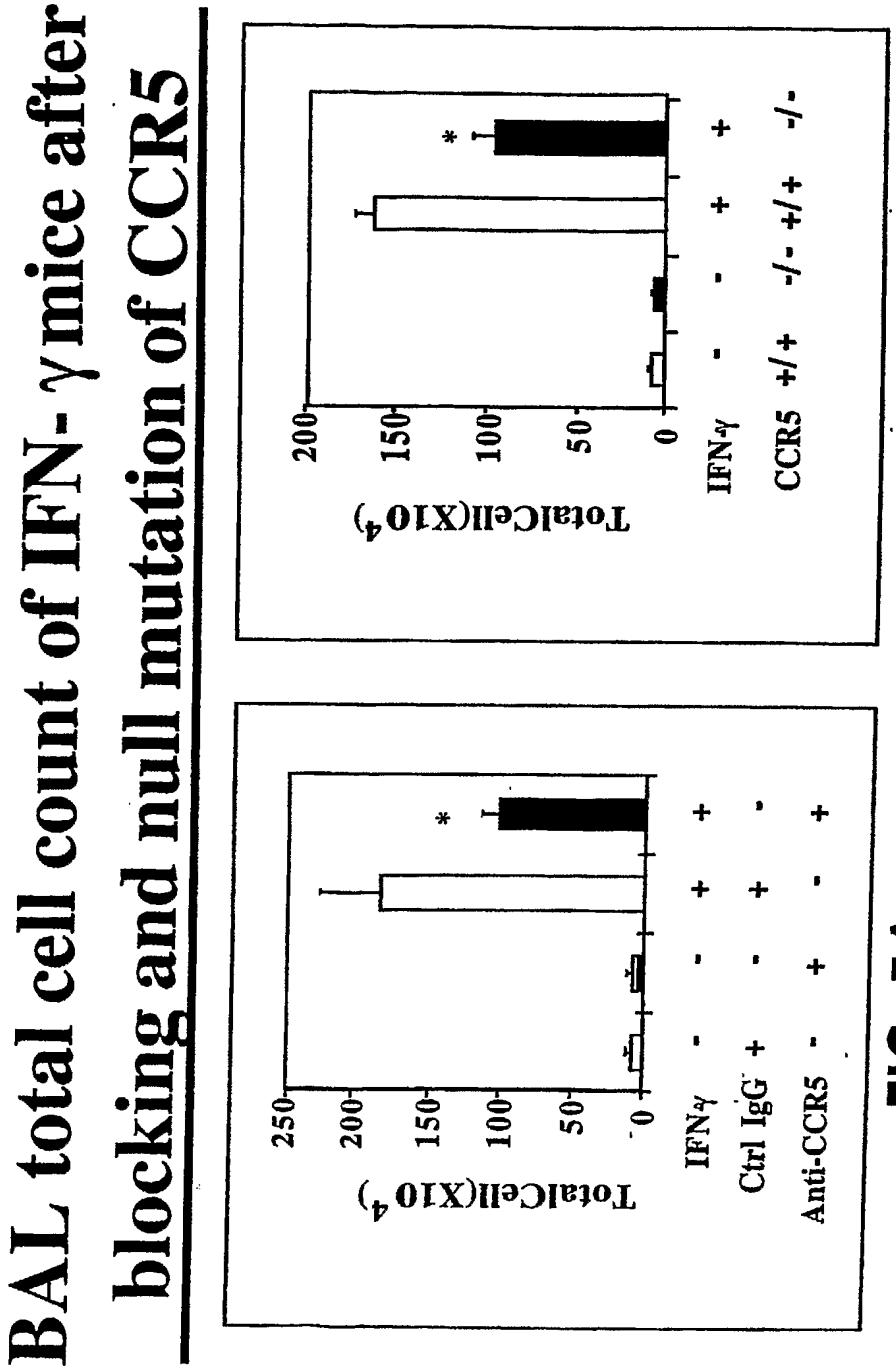

IFNγTG - - + +
Anti-CCR5 - + - +
MIP-1α
MIP-1β
RANTES

FIG. 2B


45
30
15
0
MIP-1β(pg/ml)
*
IFN-γ - - + +
Ctrl IgG + - + -
Anti-CCR5 - + - +


BAL total cell count of IFN-γ mice after blocking and null mutation of CCR5
TotalCell(X10⁴)
250
200
150
100
50
0
*
IFNγ - - + +
Ctrl IgG + - + -
Anti-CCR5 - + - +
FIG. 3A
TotalCell(X10⁴)
200
150
100
50
0
*
IFNγ - - + +
CCR5 +/+ -/- +/+ -/-
FIG. 3B

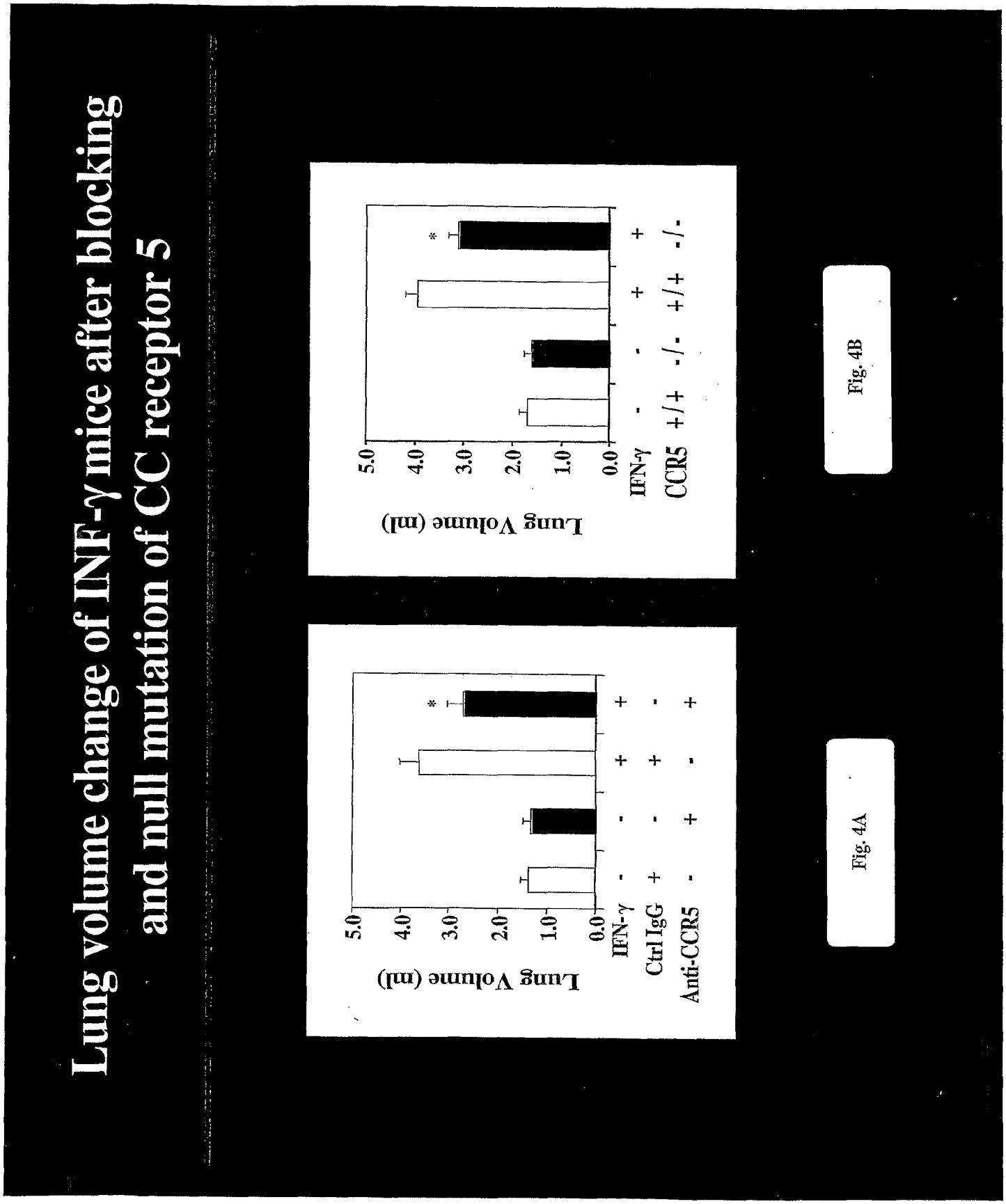
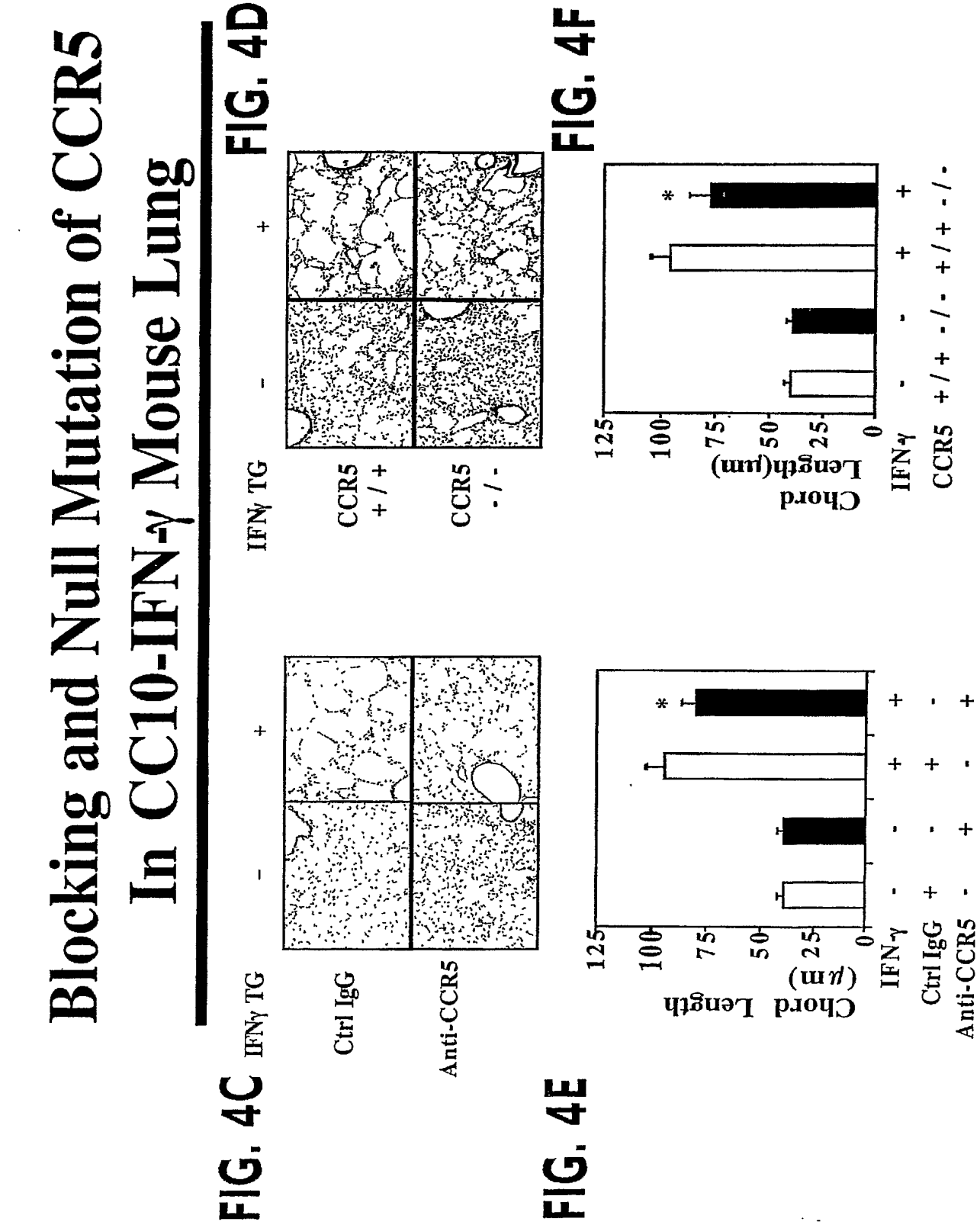

Lung volume change of INF-γ mice after blocking and null mutation of CC receptor 5
Lung Volume (ml)
5.0
4.0
3.0
2.0
1.0
0.0
IFN-γ - - + +
Ctrl IgG + - + -
Anti-CCR5 - + - +
*
Lung Volume (ml)
5.0
4.0
3.0
2.0
1.0
0.0
IFN-γ - - + +
CCR5 +/+ -/- +/+ -/-
*

Fig. 4A

Fig. 4B

Blocking and Null Mutation of CCR5 In CC10-IFN-γ Mouse Lung



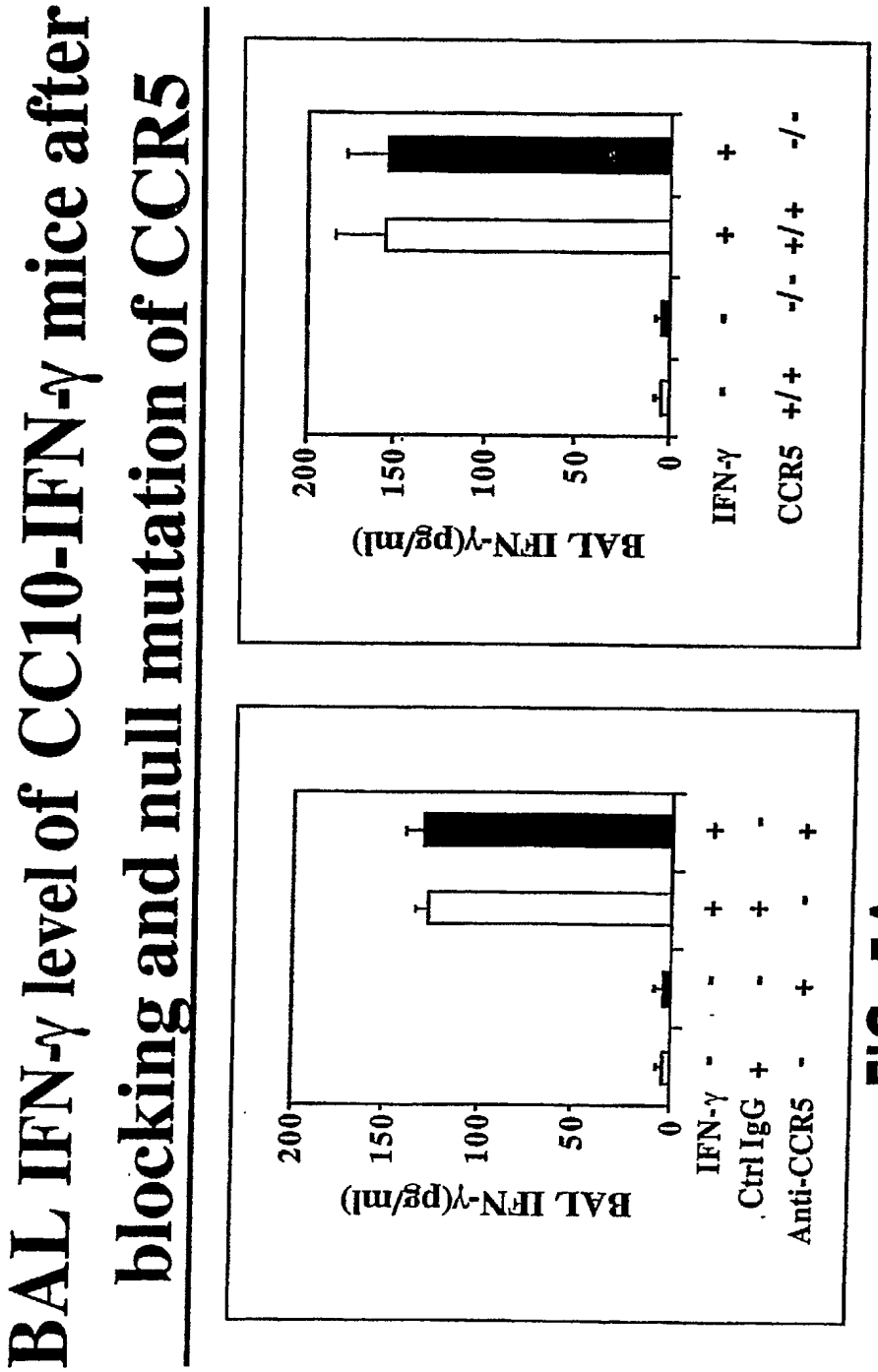

BAL IFN-γ level of CC10-IFN-γ mice after blocking and null mutation of CCR5
BAL IFN-γ(pg/ml)
200
150
100
50
0
IFN-γ - - + +
Ctrl IgG + - + -
Anti-CCR5 - + - +
BAL IFN-γ(pg/ml)
200
150
100
50
0
IFN-γ - - + +
CCR5 +/+ -/- +/+ -/-

FIG. 5A

FIG. 5B

FIG. 6A

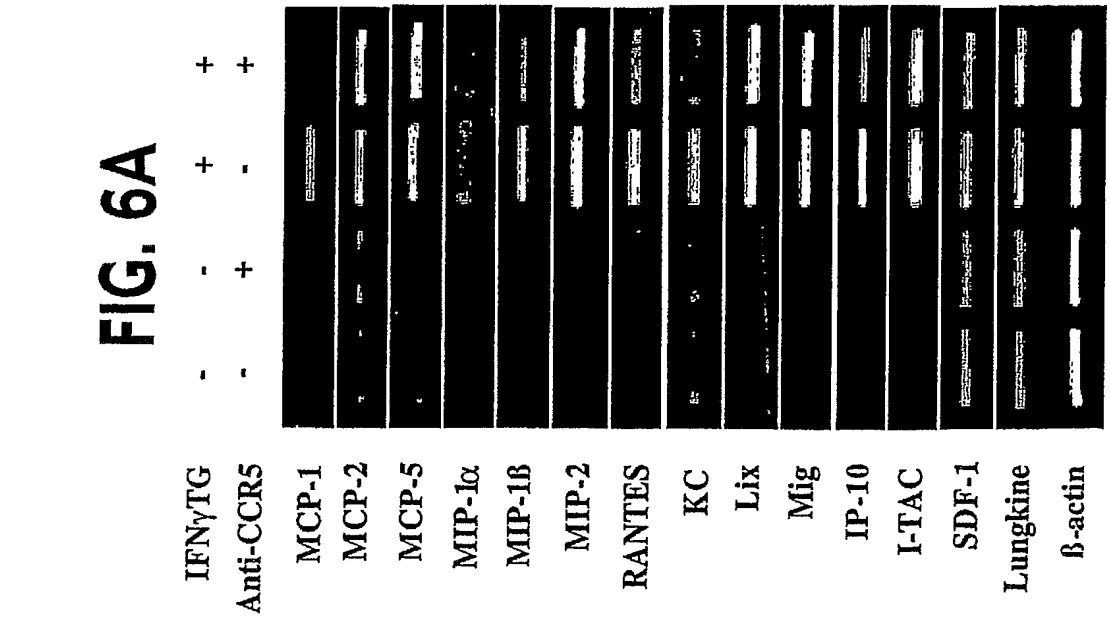

IFNγTG - - + +
Anti-CCR5 - + - +
MCP-1
MCP-2
MCP-5
MIP-1α
MIP-1ß
MIP-2
RANTES
KC
Lix
Mig
IP-10
I-TAC
SDF-1
Lungkine
ß-actin

FIG. 6B

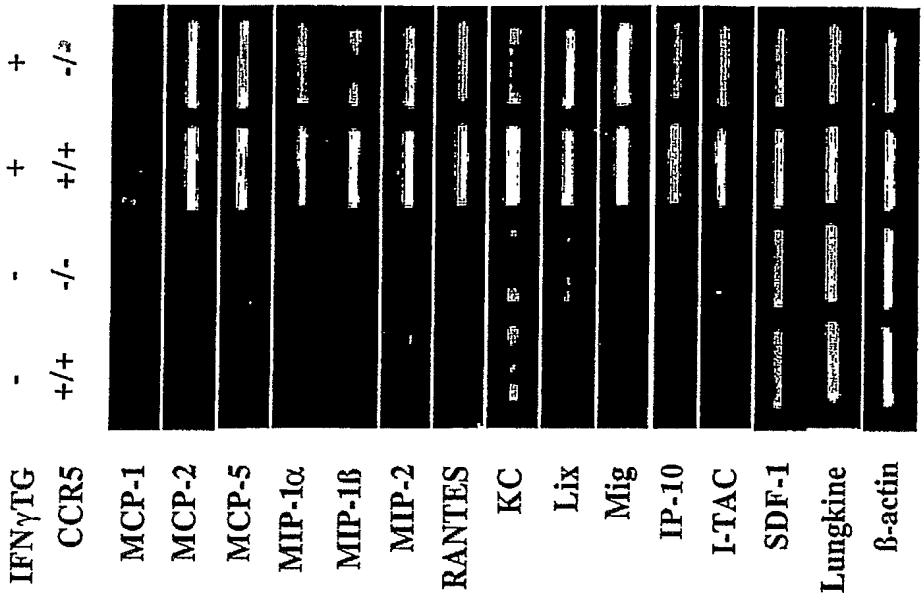

IFNγTG - - + +
CCR5 +/+ -/- +/+ -/-
MCP-1
MCP-2
MCP-5
MIP-1α
MIP-1ß
MIP-2
RANTES
KC
Lix
Mig
IP-10
I-TAC
SDF-1
Lungkine
ß-actin

FIG. 6C

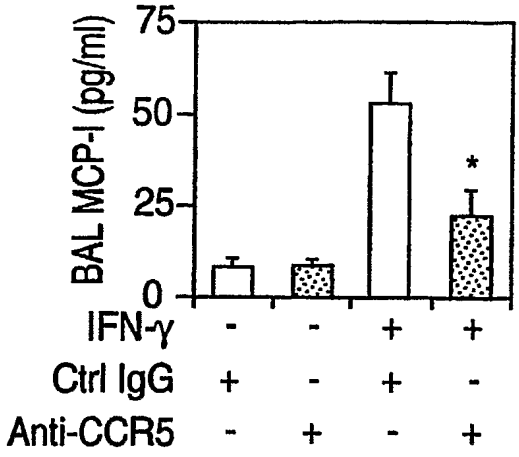


FIG. 6D

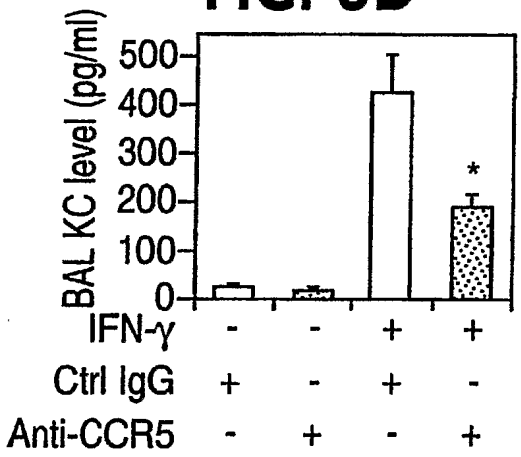


FIG. 6E

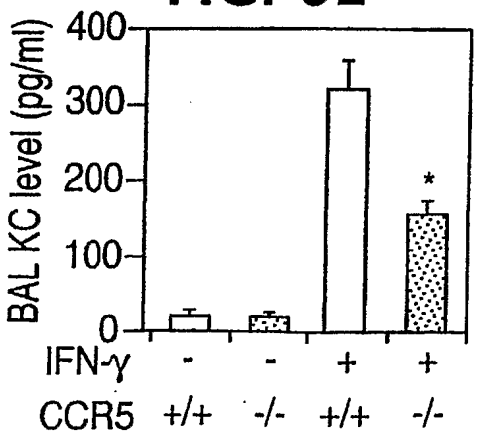


FIG. 6F

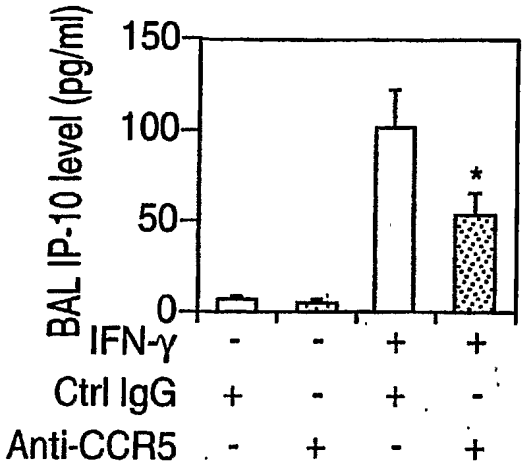
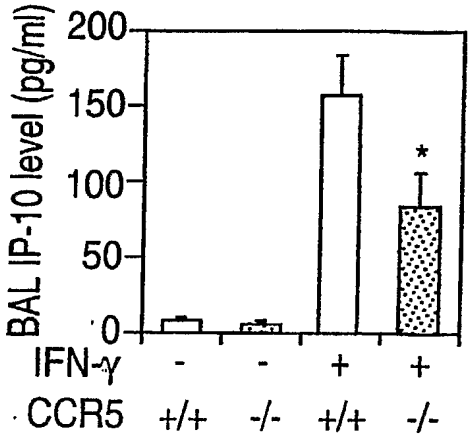

BAL IP-10 level (pg/ml)
150
100
50
0
*
IFN-γ - - + +
Ctrl IgG + - + -
Anti-CCR5 - + - +

FIG. 6G


BAL IP-10 level (pg/ml)
200
150
100
50
0
*
IFN-γ - - + +
CCR5 +/+ -/- +/+ -/-

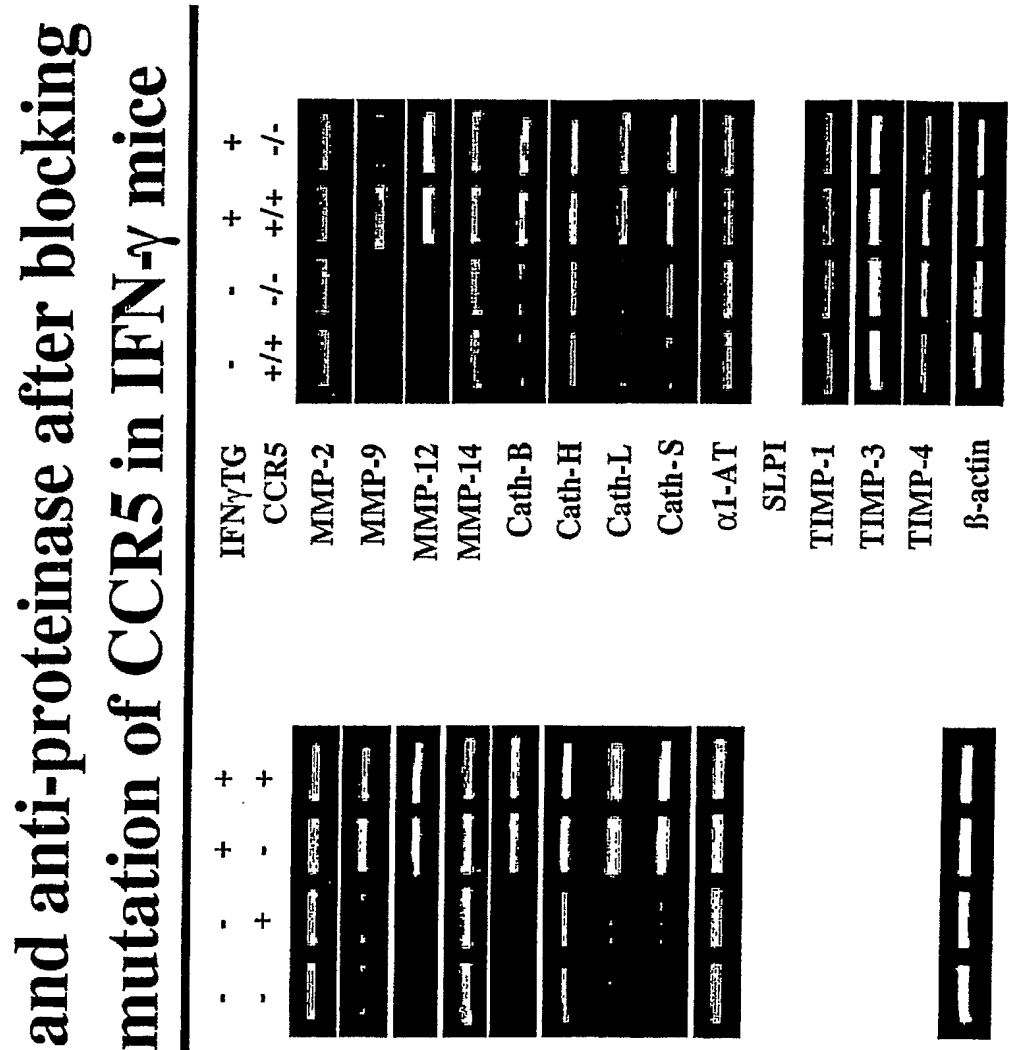

Proteinase and anti-proteinase after blocking and null mutation of CCR5 in IFN-γ mice
IFNγTG - - + +
Anti-CCR5 - + - +
MMP-2
MMP-9
MMP-12
MMP-14
Cath B
Cath H
Cath-L
Cath S
α1-AT
SLPI
TIMP-1
TIMP-3
TIMP-4
ß-actin
IFNγTG - - + +
CCR5 +/+ -/- +/+ -/-
MMP-2
MMP-9
MMP-12
MMP-14
Cath-B
Cath-H
Cath-L
Cath-S
α1-AT
SLPI
TIMP-1
TIMP-3
TIMP-4
ß-actin

FIG. 7A

FIG. 7B

TUNEL Staining in IFN-γ Mouse Lung after blocking and null mutation of CCR5

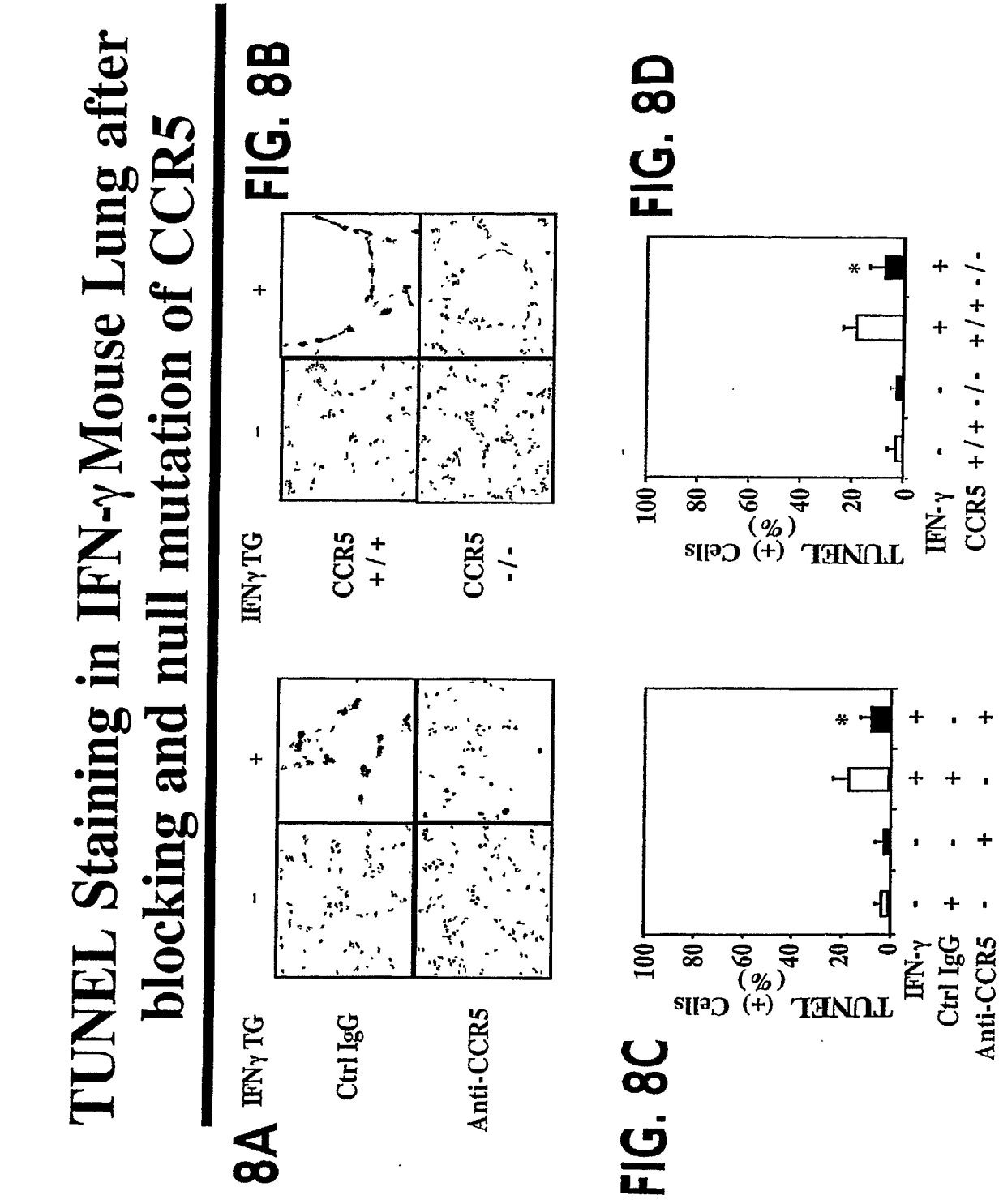
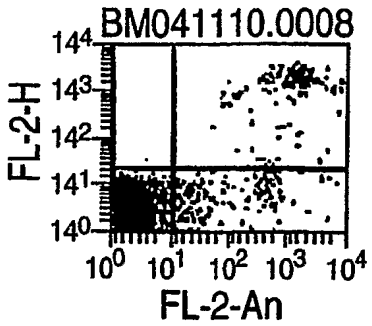
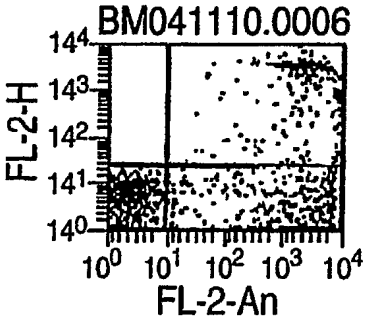


FIG. 8E



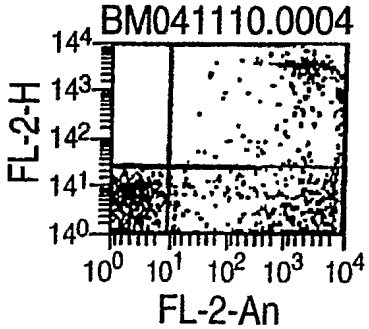
QUAD	EVENTS	% GAINED	TOTAL
UL	0	0.00	0.00
UR	202	2.15	2.02
LL	0666	95.08	60.65
LR	109	2.14	1.99

FIG. 8F



QUAD	EVENTS	% GAINED	% TOTAL
UL	0	0.00	0.00
UR	540	25.59	5.45
LL	923	45.97	9.23
LR	545	27.14	5.45

FIG. 8G



QUAD	EVENTS	% GAINED	% TOTAL
UL	7	0.12	0.07
UR	541	9.47	5.41
LL	41.96	73.45	41.98
LR	960	18.96	9.69

FIG. 9A

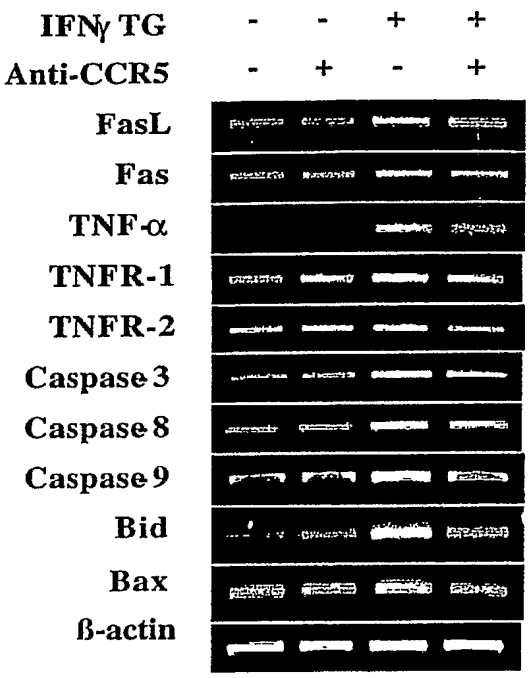


FIG. 9D

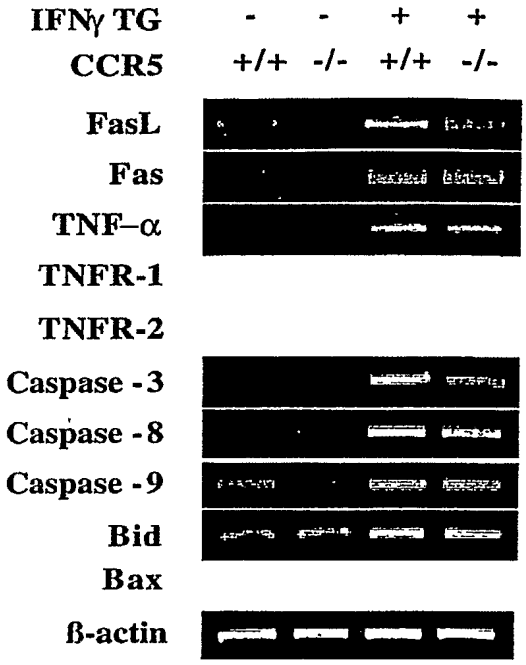


FIG. 9B

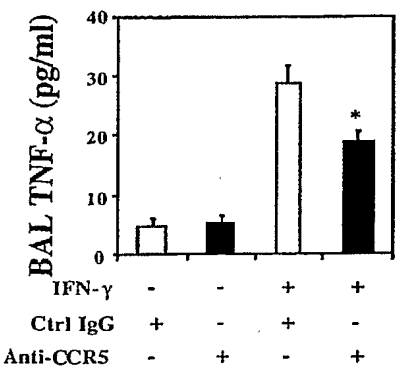


FIG. 9E

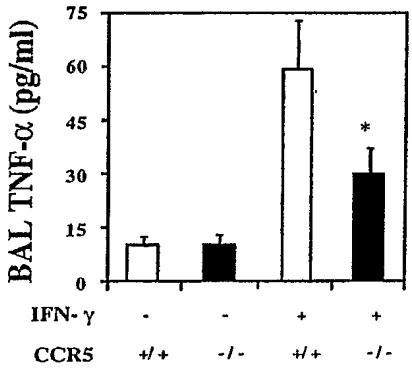


FIG. 9C

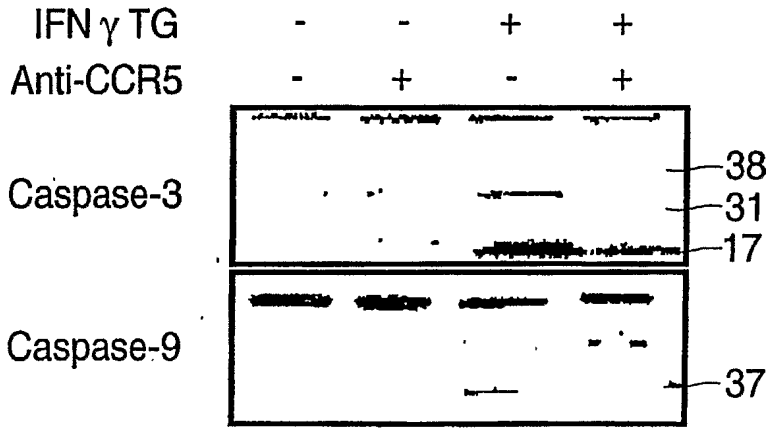


FIG. 9F

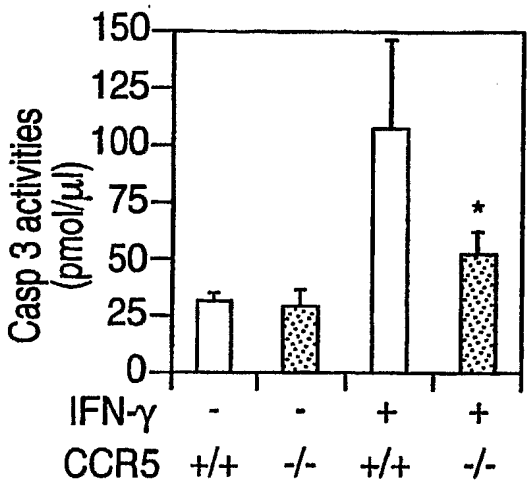

150
125
100
75
50
25
0
Casp 3 activities (pmol/μl)
*
IFN-γ - - + +
CCR5 +/+ -/- +/+ -/-

FIG. 9G

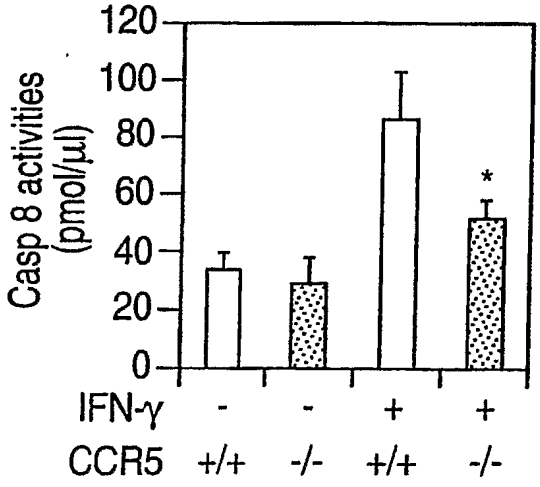

120
100
80
60
40
20
0
Casp 8 activities (pmol/μl)
*
IFN-γ - - + +
CCR5 +/+ -/- +/+ -/-

FIG. 10A

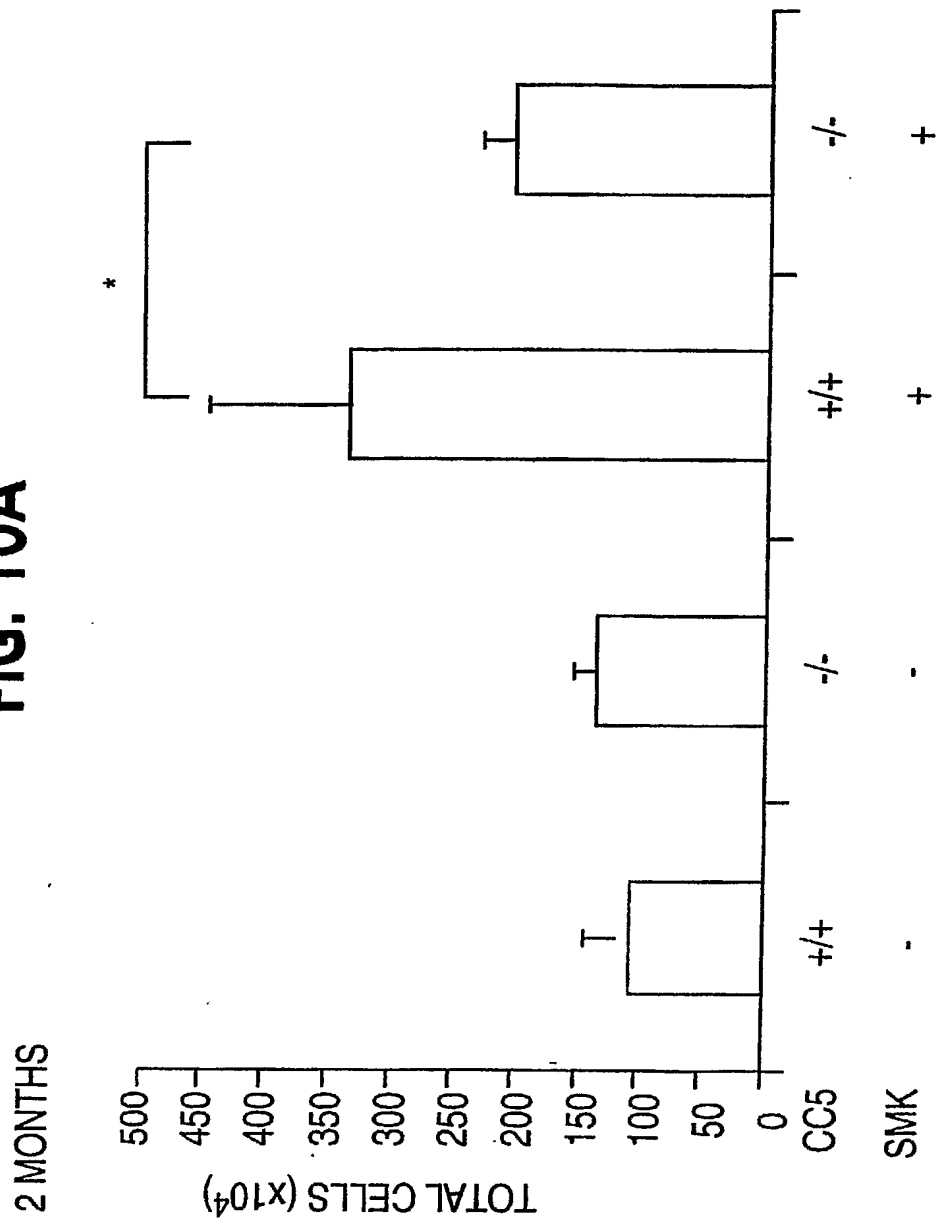

2 MONTHS
TOTAL CELLS (x10⁴)
500
450
400
350
300
250
200
150
100
50
0
*
+/+
-/-
+/+
-/-
CC5
SMK
-
+
-
+

FIG. 10B

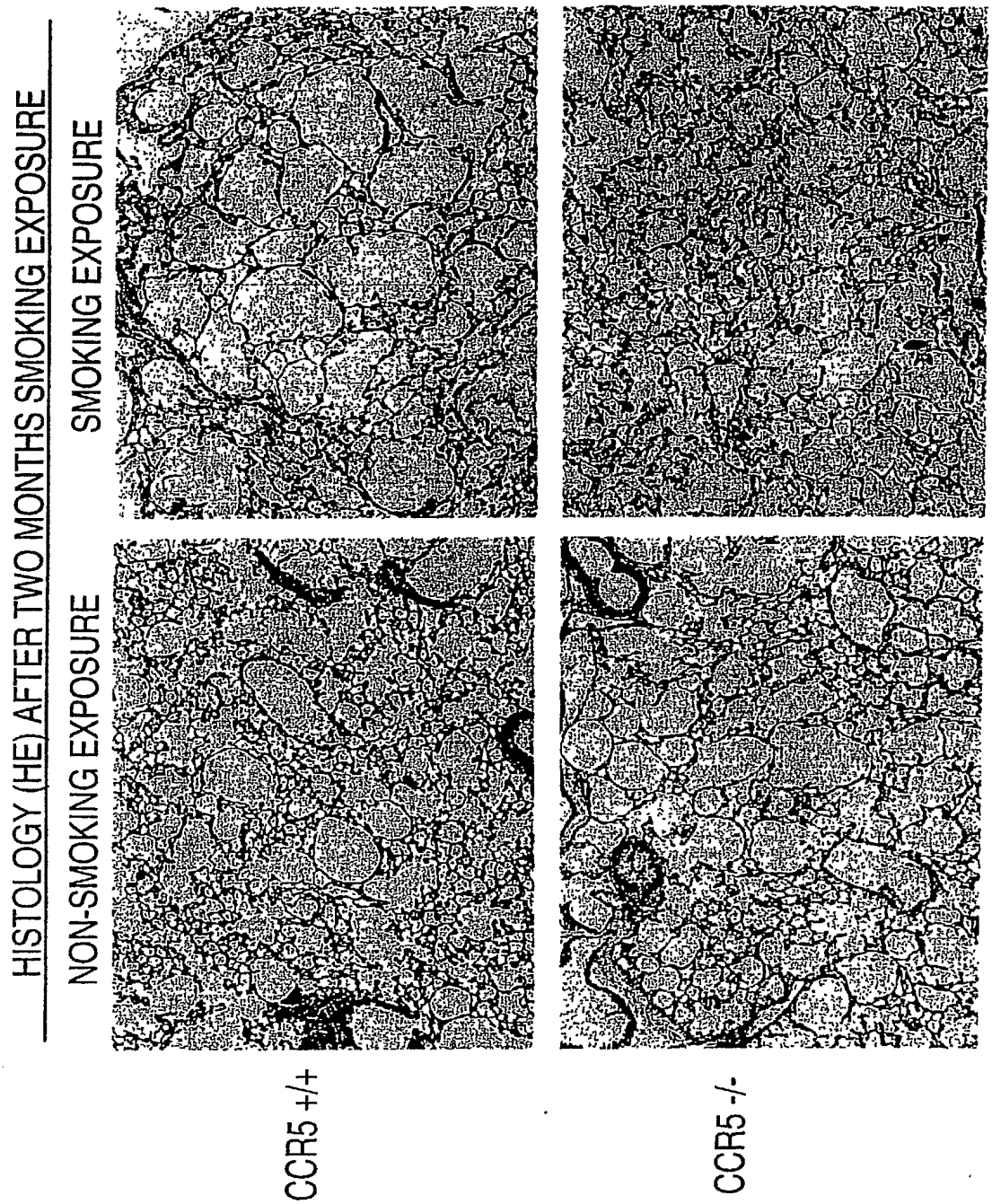
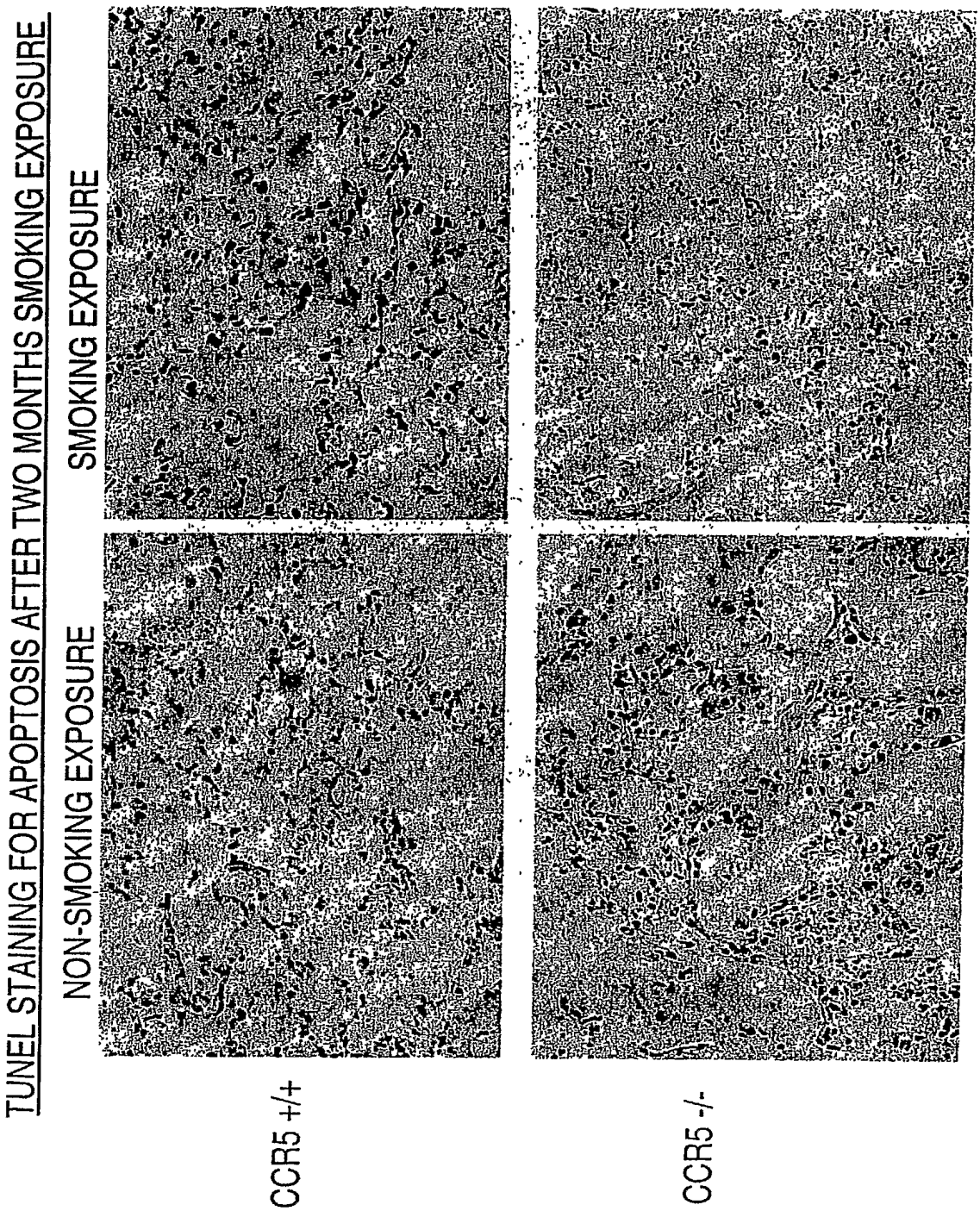

HISTOLOGY (HE) AFTER TWO MONTHS SMOKING EXPOSURE
NON-SMOKING EXPOSURE
SMOKING EXPOSURE
CCR5 +/+
CCR5 -/-
10x H&E

FIG. 10C


TUNEL STAINING FOR APOPTOSIS AFTER TWO MONTHS SMOKING EXPOSURE
NON-SMOKING EXPOSURE
SMOKING EXPOSURE
CCR5 +/+
CCR5 -/-

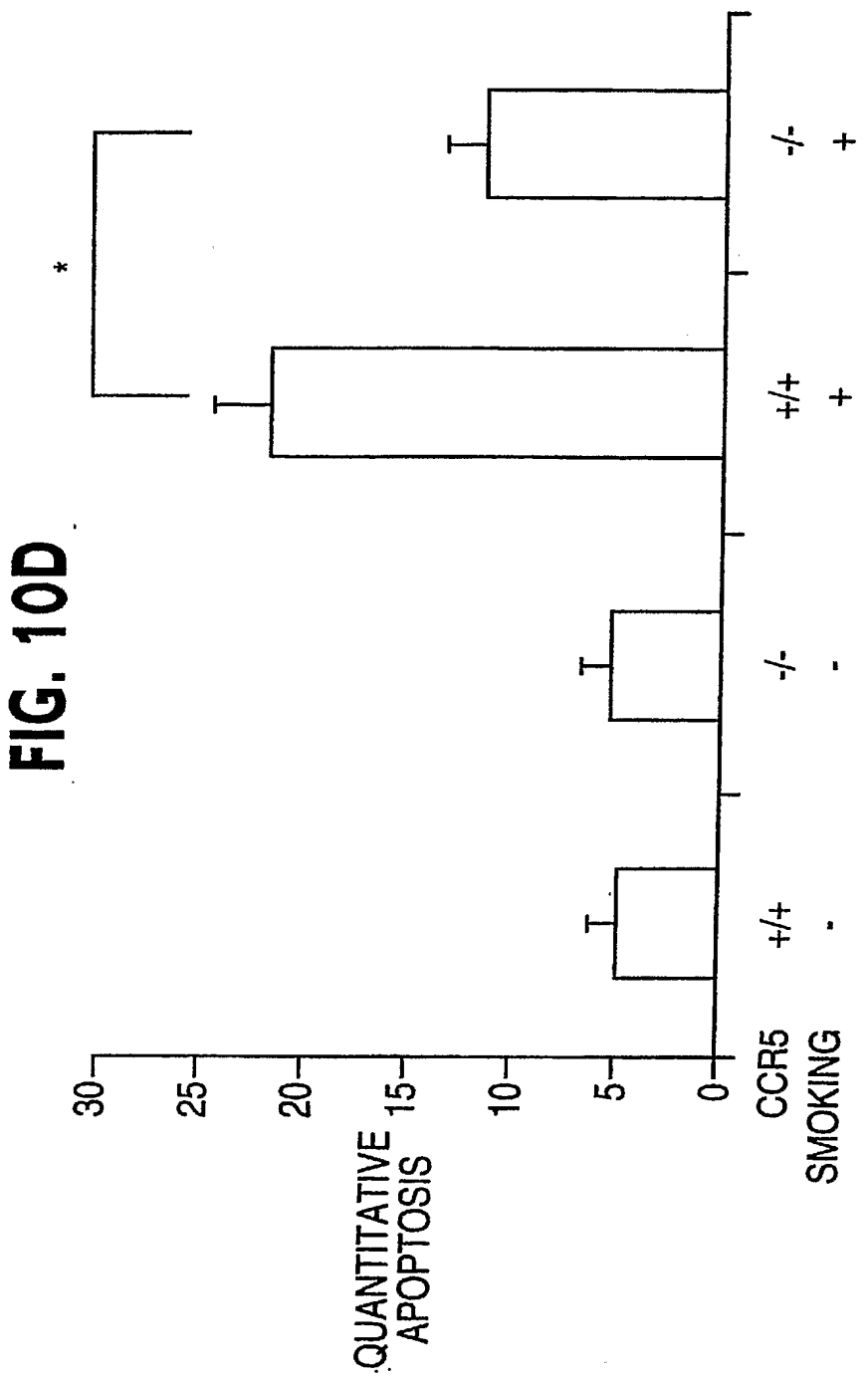


FIG. 10D
QUANTITATIVE APOPTOSIS
30
25
20
15
10
5
0
*
CCR5
SMOKING
+/+
-
-/-
-
+/+
+
-/-
+

FIG. 11
CCR5 ISH in CC10-IL-13 Mouse Lung

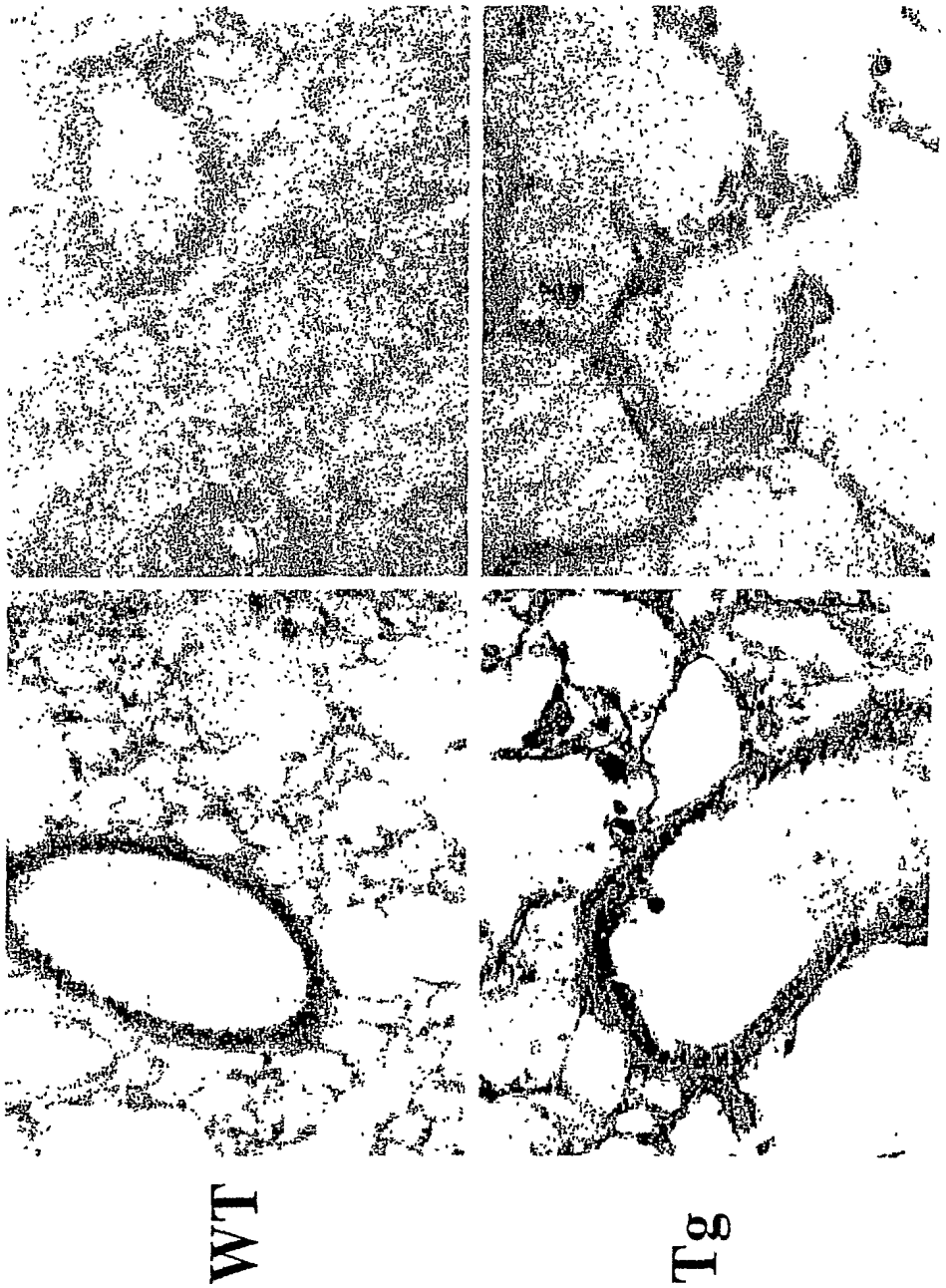


FIG. 12
CCR5 IHC in CC10-IL-13 Mouse Lung

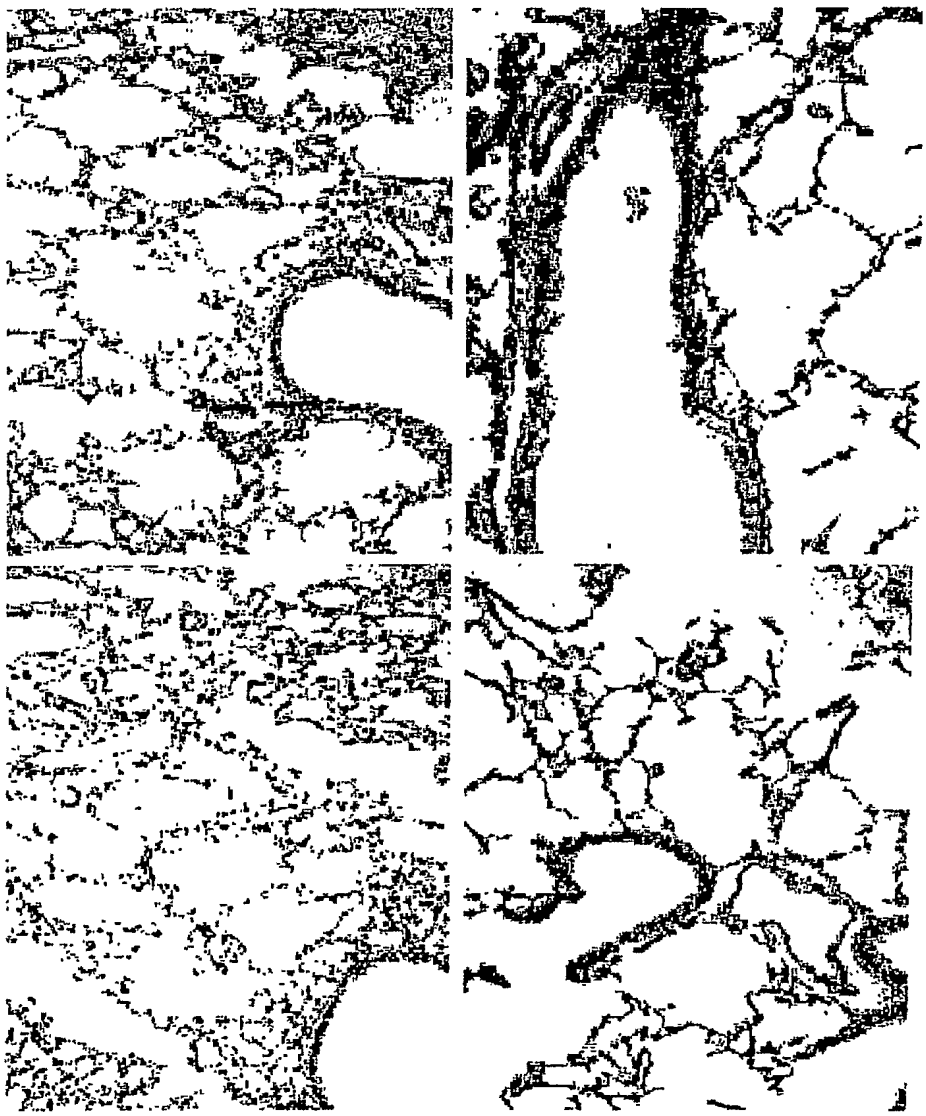
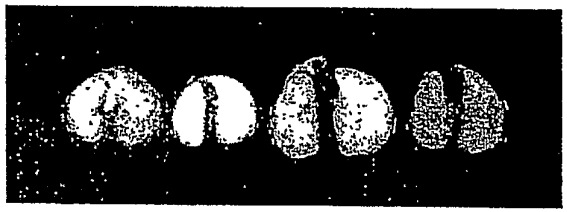
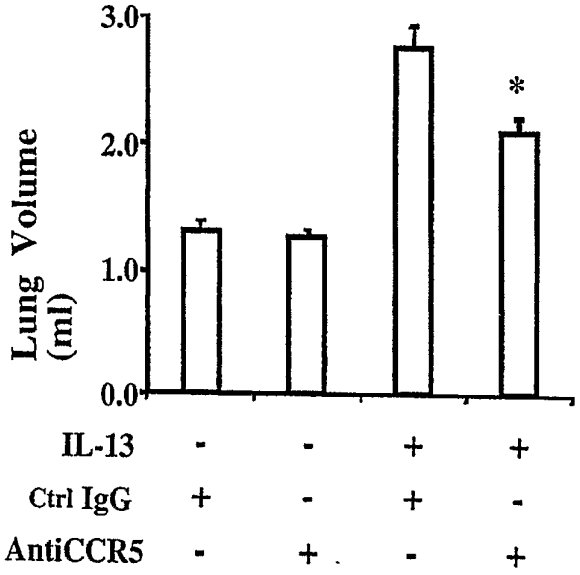


FIG. 13

Lung Volume of IL-13 Mice After block and null mutation of CCR5

Ctrl IgG	+	-	+	-
Anti-CCR5	-	+	-	+
iIL-13	-	-	+	+





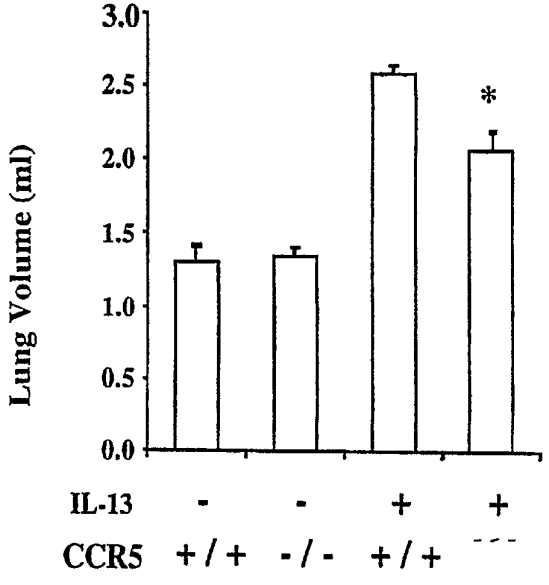


FIG. 14A BAL total cell and differential of iIL-13 mice after block and null mutation of CCR5

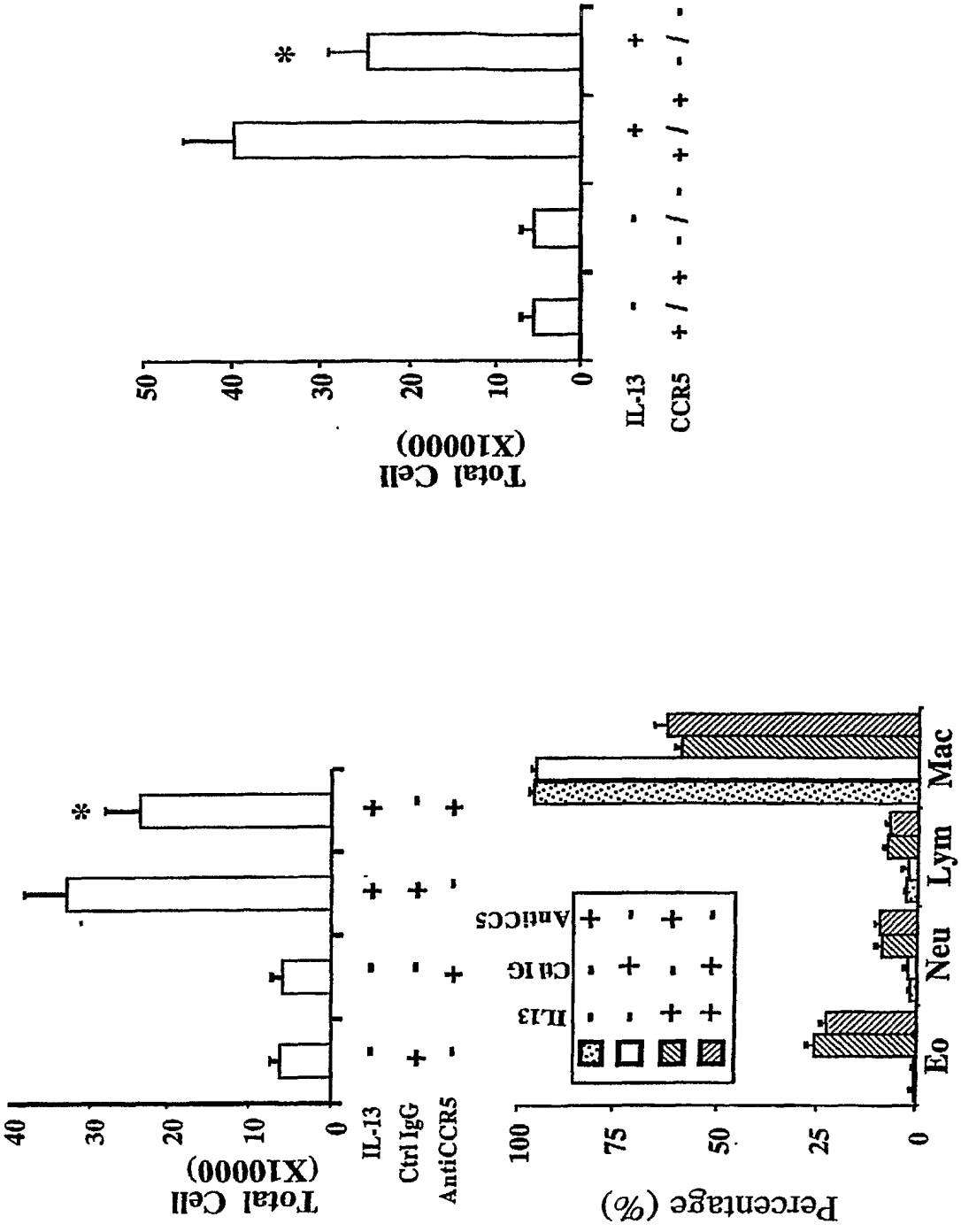


FIG. 14B

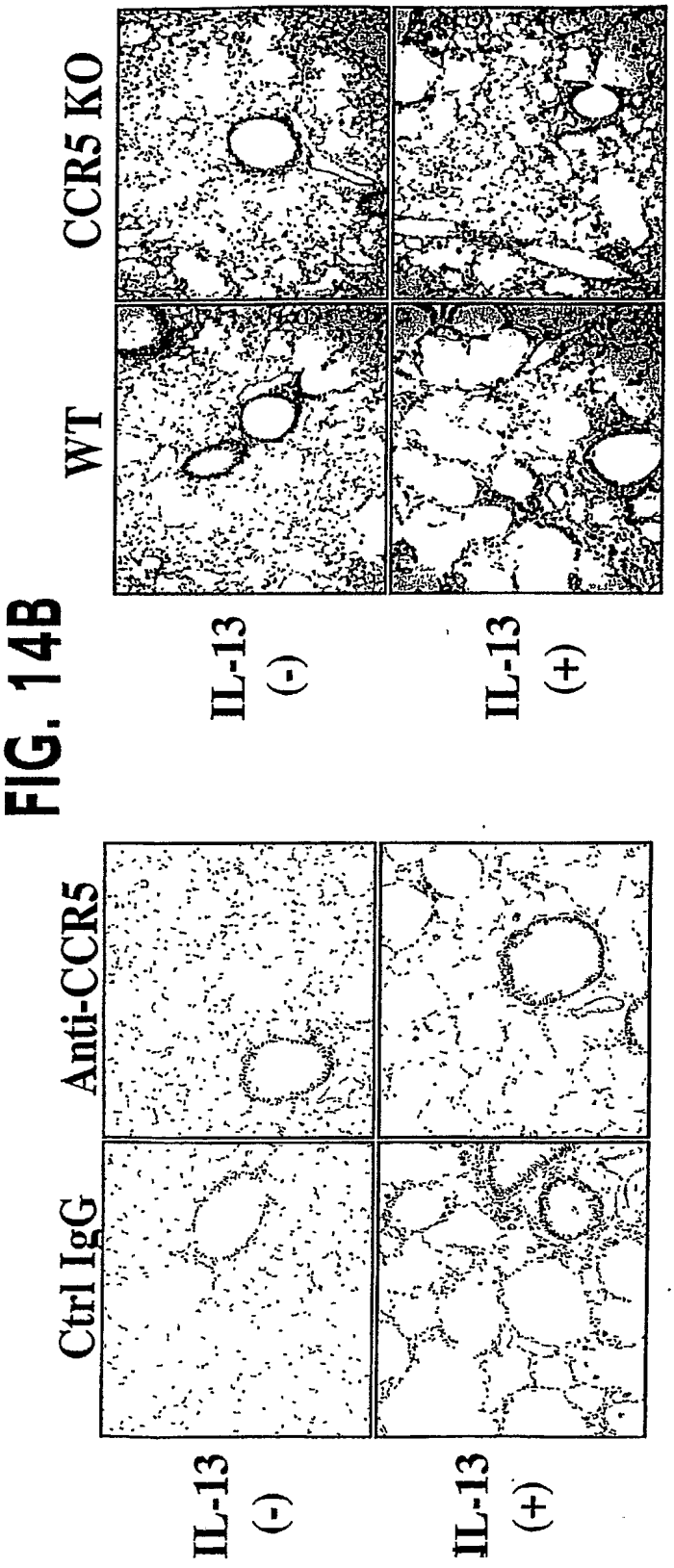

WT
CCR5 KO
IL-13 (-)
IL-13 (+)
Ctrl IgG
Anti-CCR5
IL-13 (-)
IL-13 (+)
ChordLength (μm)
100.0
80.0
60.0
40.0
20.0
0.0
*
IL-13 - - + +
Ctrl IgG + + - -
Anti-CCR5 - + - +

FIG. 15

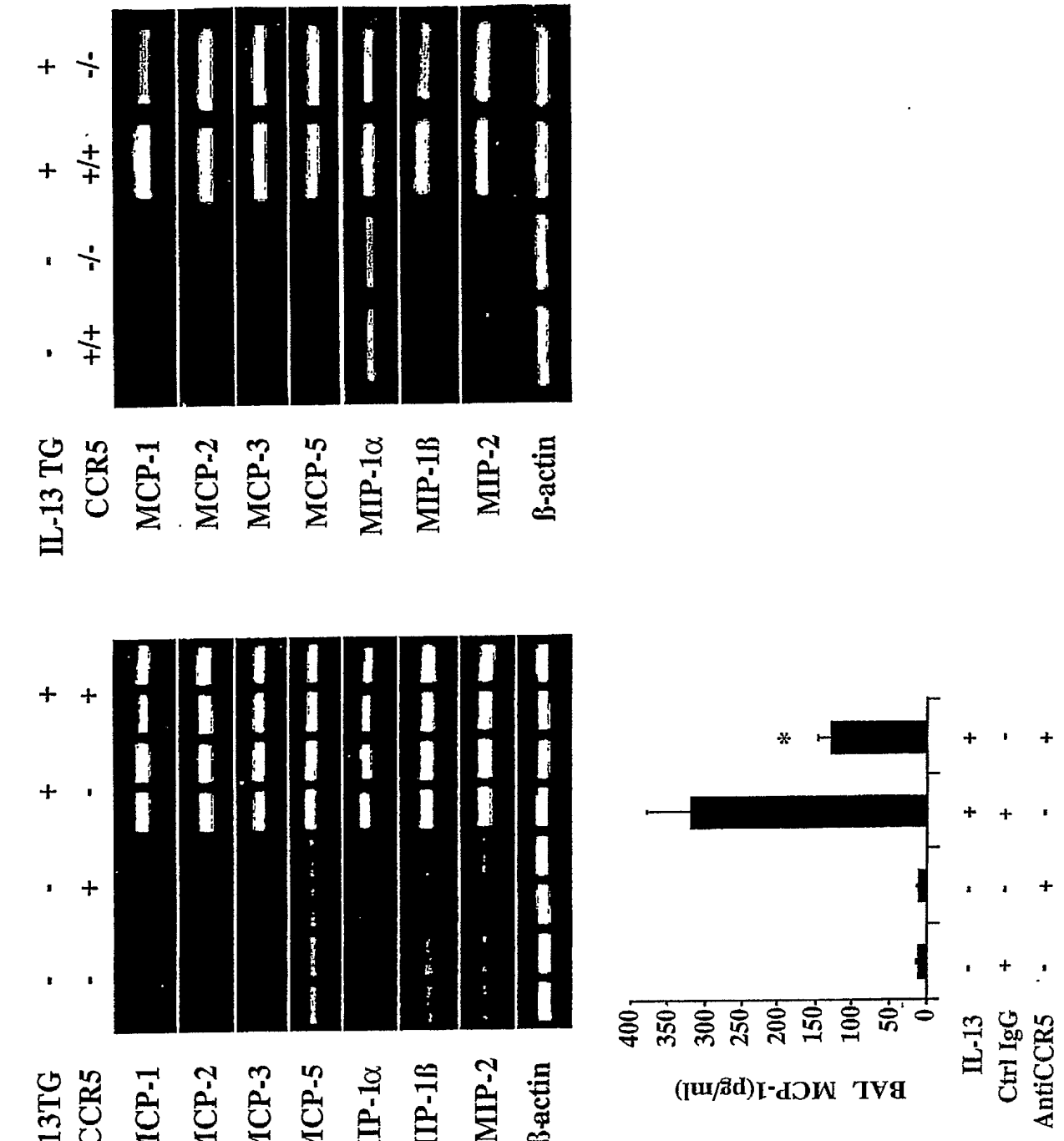

IL-13TG
AntiCCR5
MCP-1
MCP-2
MCP-3
MCP-5
MIP-1α
MIP-1ß
MIP-2
ß-actin
IL-13 TG
CCR5
MCP-1
MCP-2
MCP-3
MCP-5
MIP-1α
MIP-1ß
MIP-2
ß-actin
BAL MCP-1(pg/ml)
400
350
300
250
200
150
100
50
0
*
IL-13
Ctrl IgG
AntiCCR5

FIG. 16

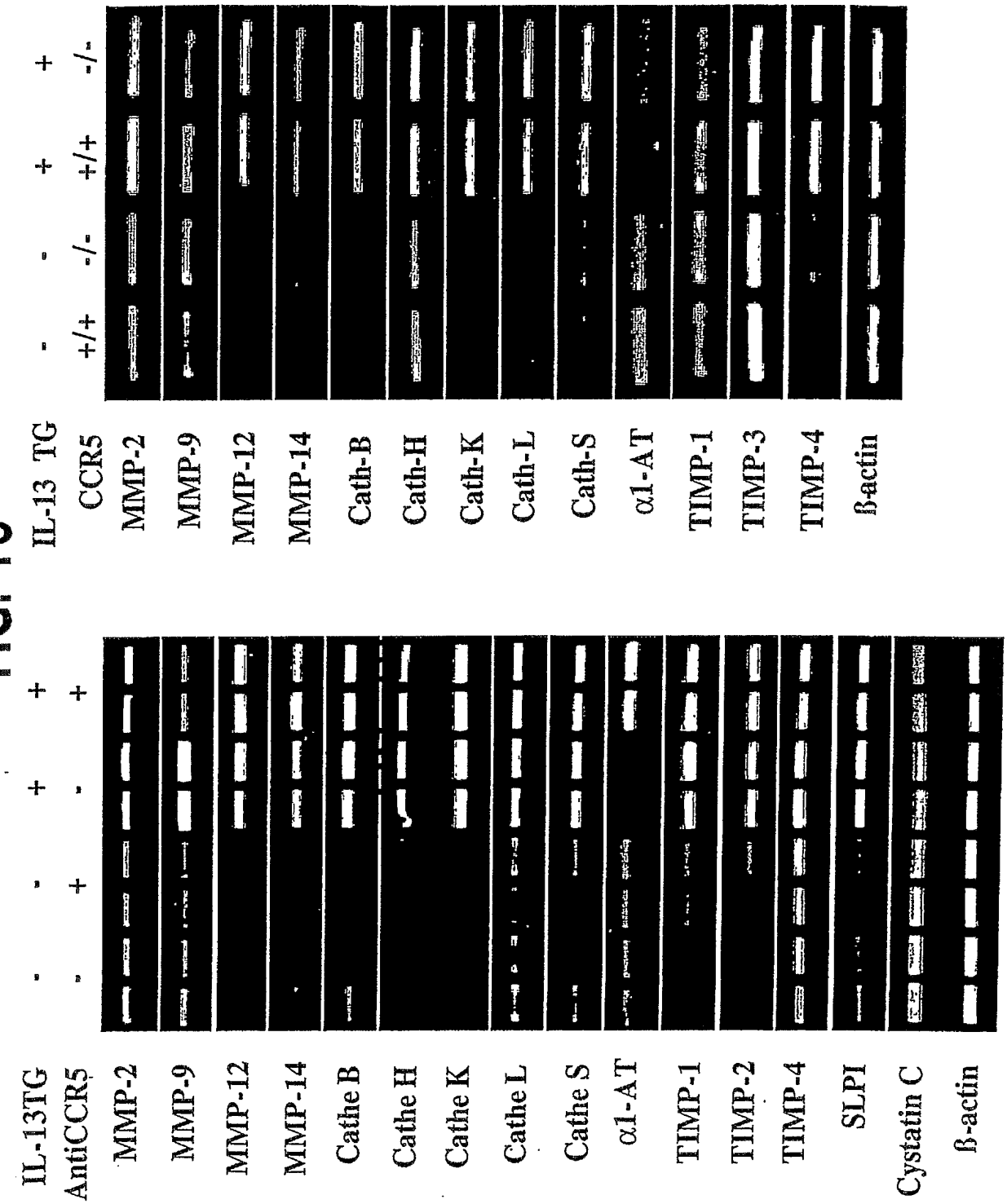
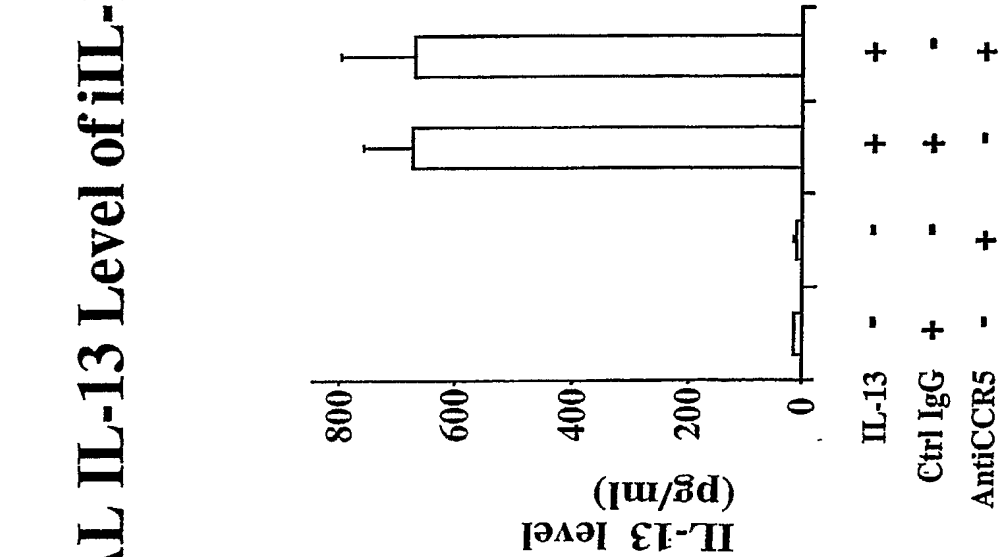

IL-13TG
AntiCCR5
MMP-2
MMP-9
MMP-12
MMP-14
Cathe B
Cathe H
Cathe K
Cathe L
Cathe S
α1-AT
TIMP-1
TIMP-2
TIMP-4
SLPI
Cystatin C
ß-actin
IL-13 TG
CCR5
MMP-2
MMP-9
MMP-12
MMP-14
Cath-B
Cath-H
Cath-K
Cath-L
Cath-S
α1-AT
TIMP-1
TIMP-3
TIMP-4
ß-actin
+/+
-/-
+/+
-/-

FIG. 17

BAL IL-13 Level of iIL-13 mice treated with Anti-CCR5 antibody



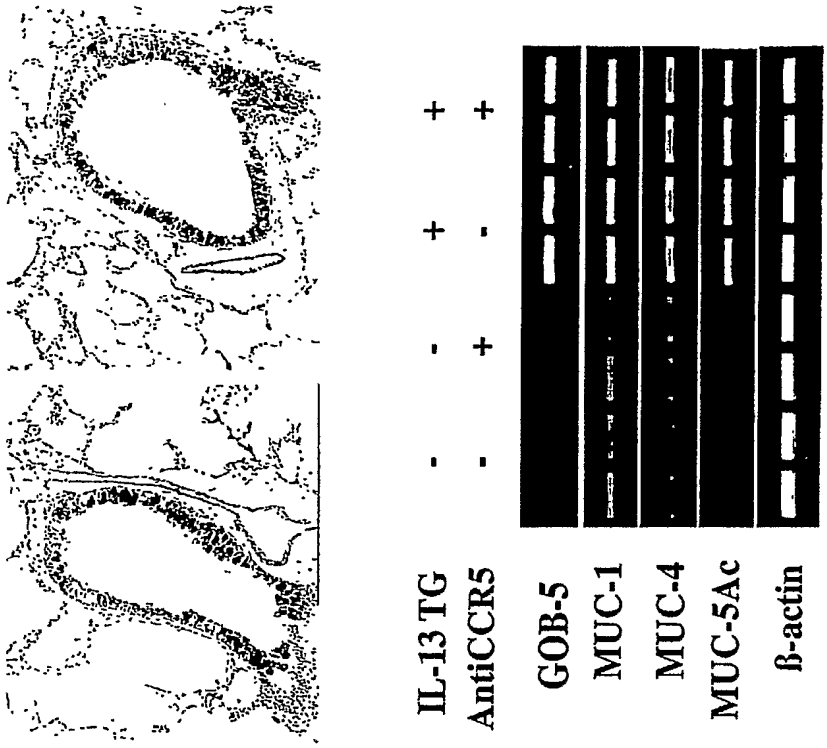


FIG. 18

TUNEL Staining in iIL-13 Mouse Lung

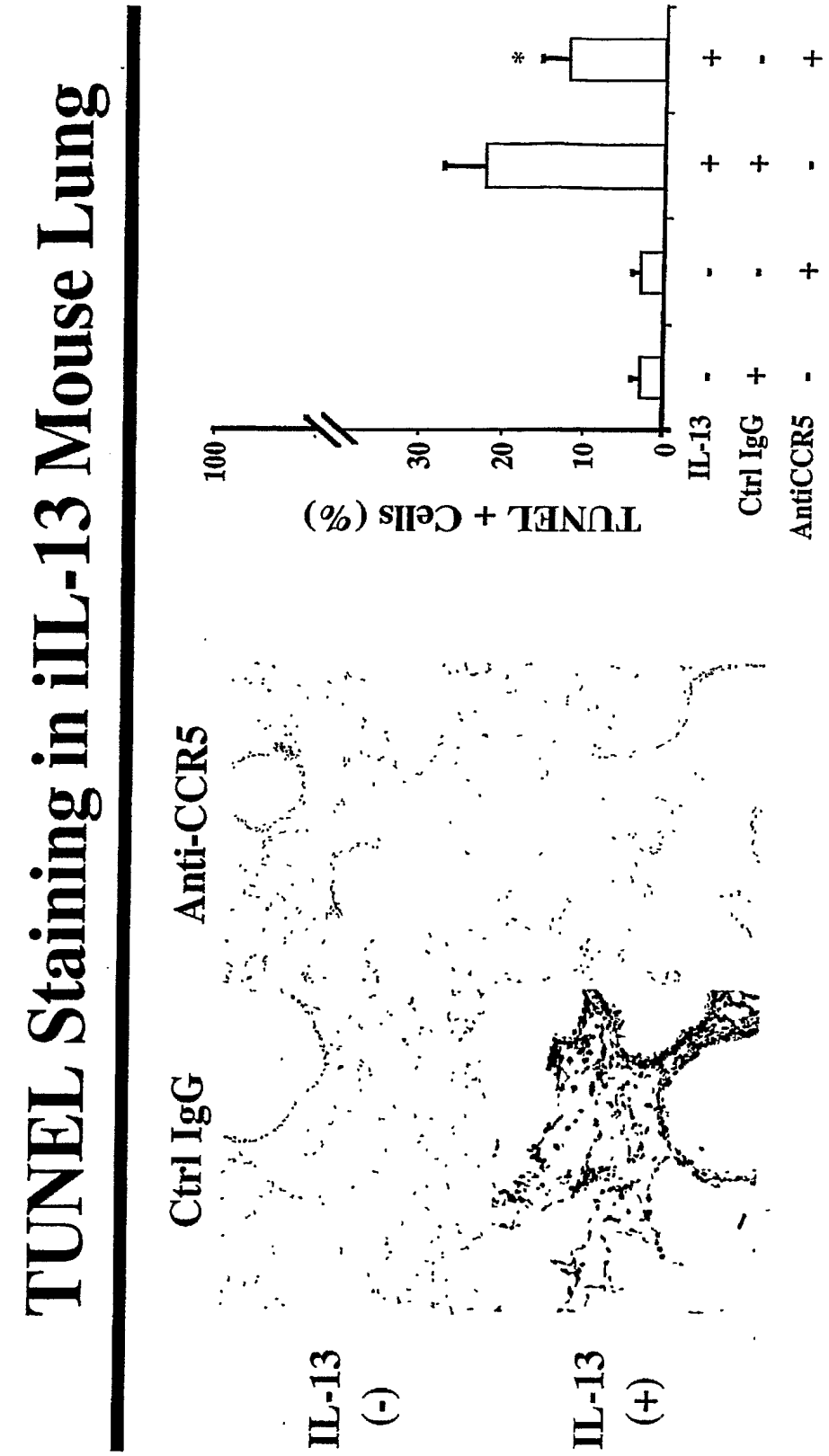


FIG. 19

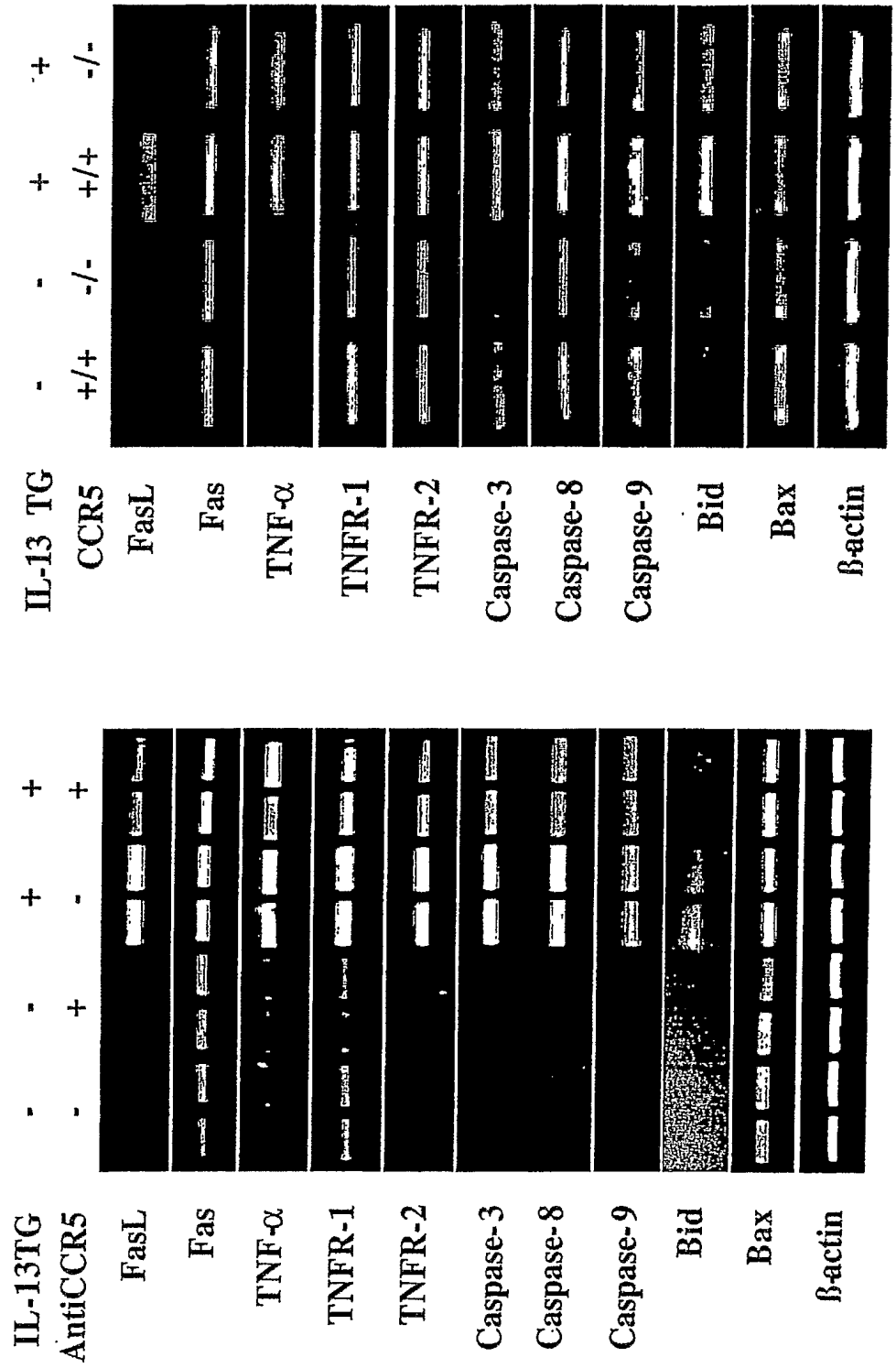

IL-13TG
AntiCCR5
FasL
Fas
TNF-α
TNFR-1
TNFR-2
Caspase-3
Caspase-8
Caspase-9
Bid
Bax
ß-actin
IL-13 TG
CCR5
FasL
Fas
TNF-α
TNFR-1
TNFR-2
Caspase-3
Caspase-8
Caspase-9
Bid
Bax
ß-actin

FIG. 20

Western Blot Detecting Apoptotic Factors in IL-13 Transgenic Mouse Lungs

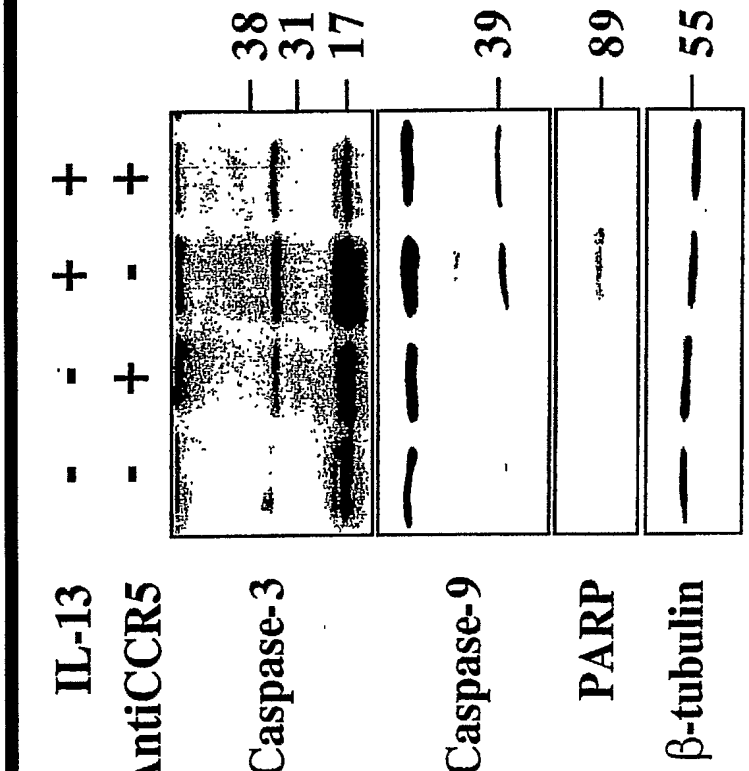


FIG. 21

CCR5 ISH in CC10-IL-13 Mouse Lung

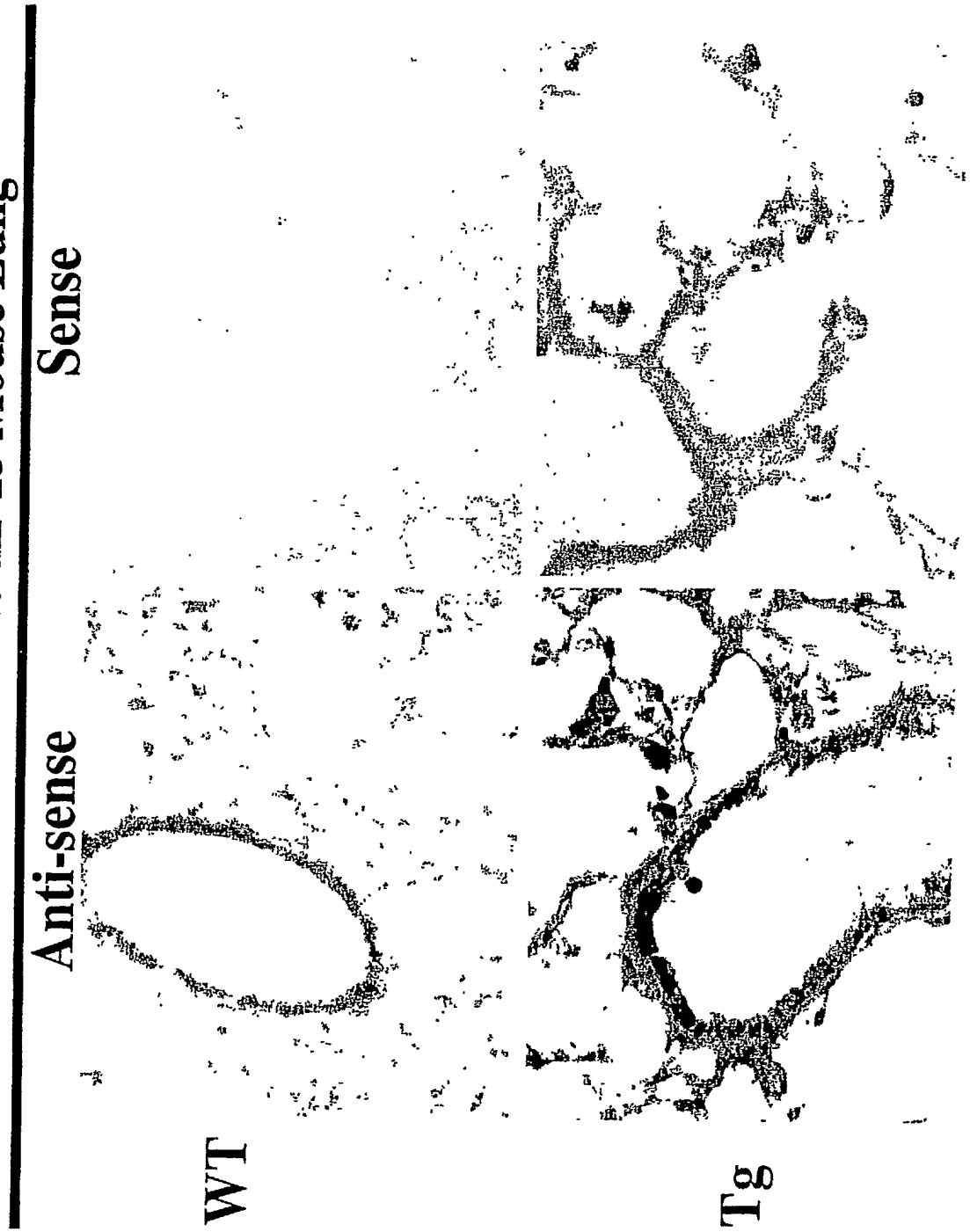


FIG. 22

CCR5 IHC in CC10-IL-13 Mouse Lung

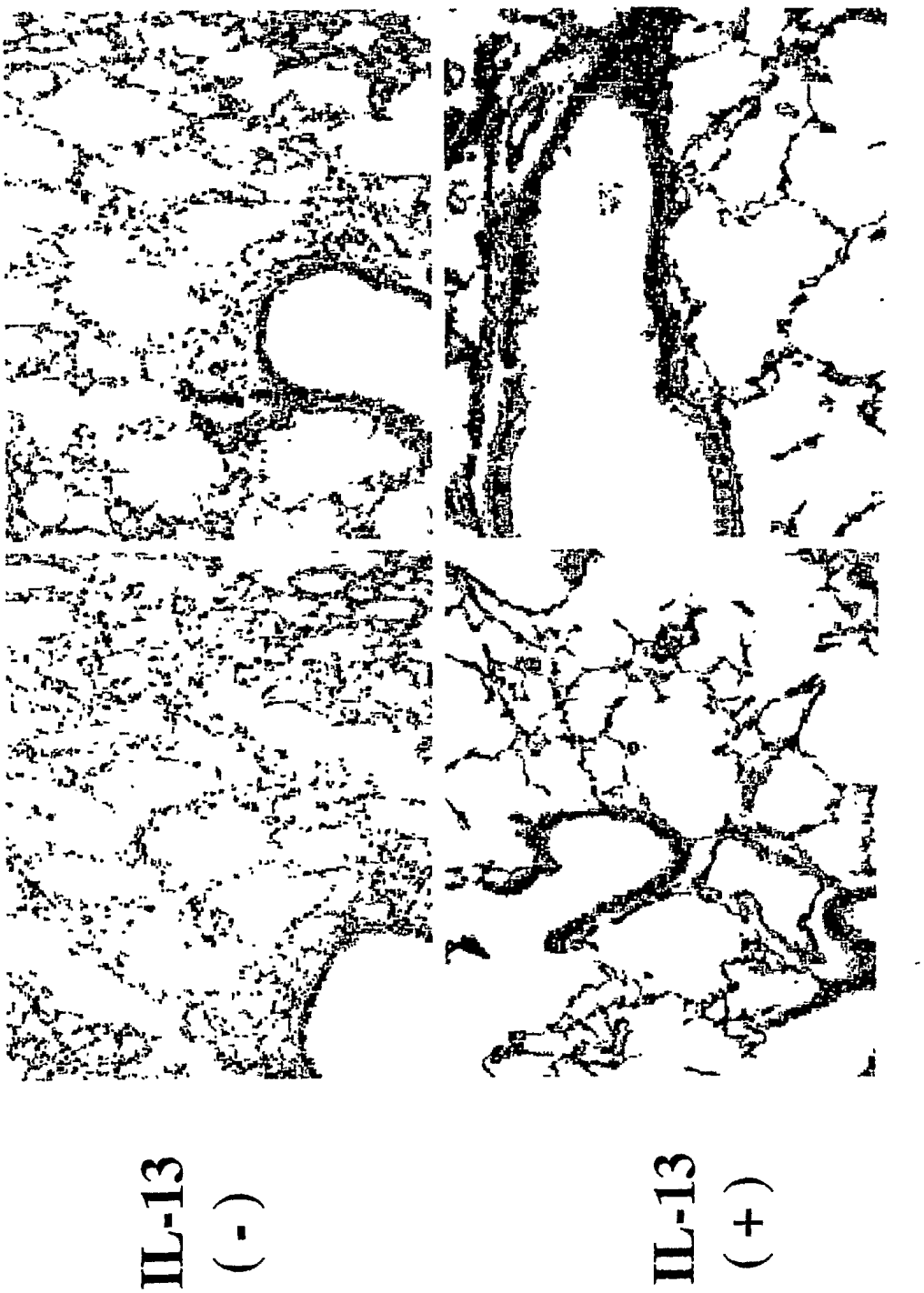


FIG. 23

Caspase Activities of CCR5ko/IL-13

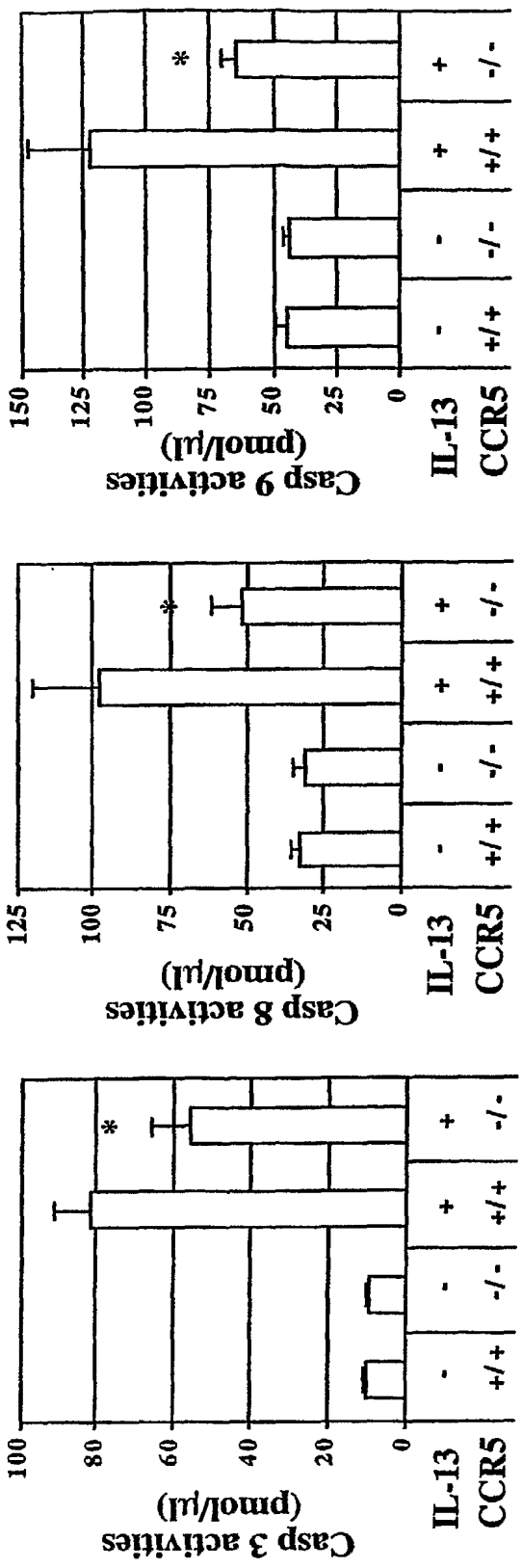


FIG. 24

CD4+ Cells in CC10-IFN-γ Mouse Lung

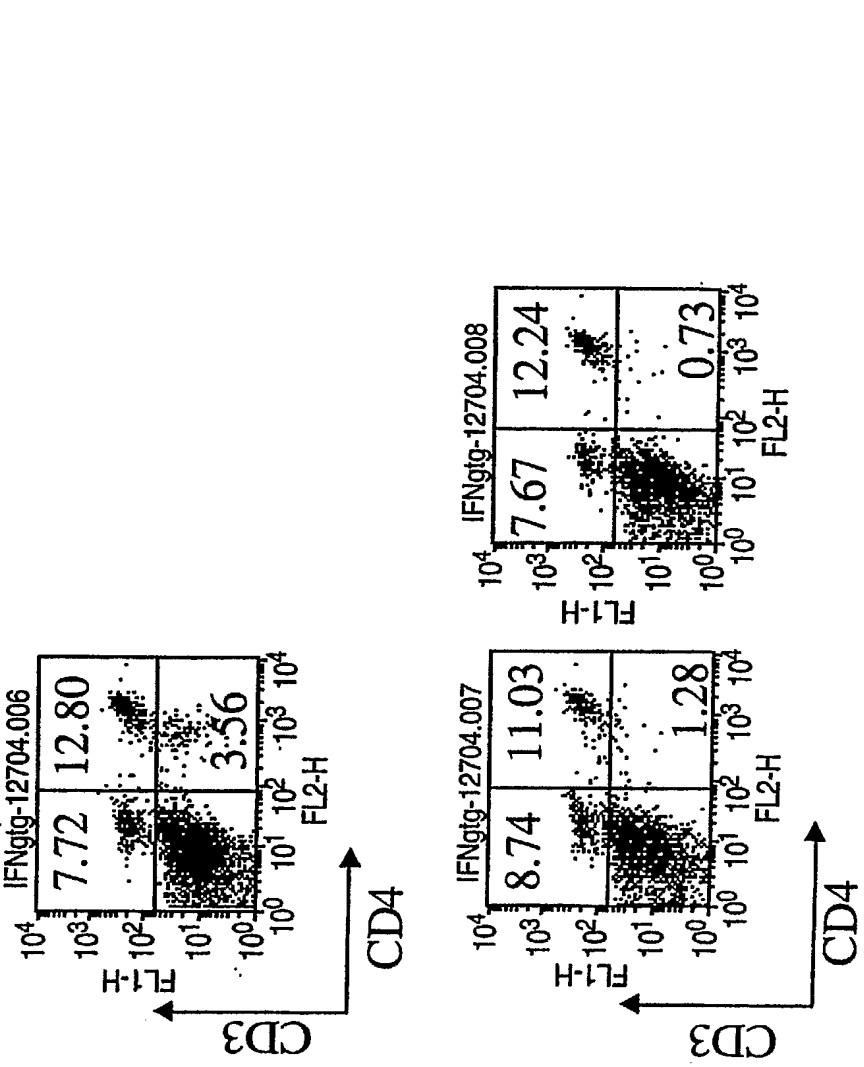


FIG. 25

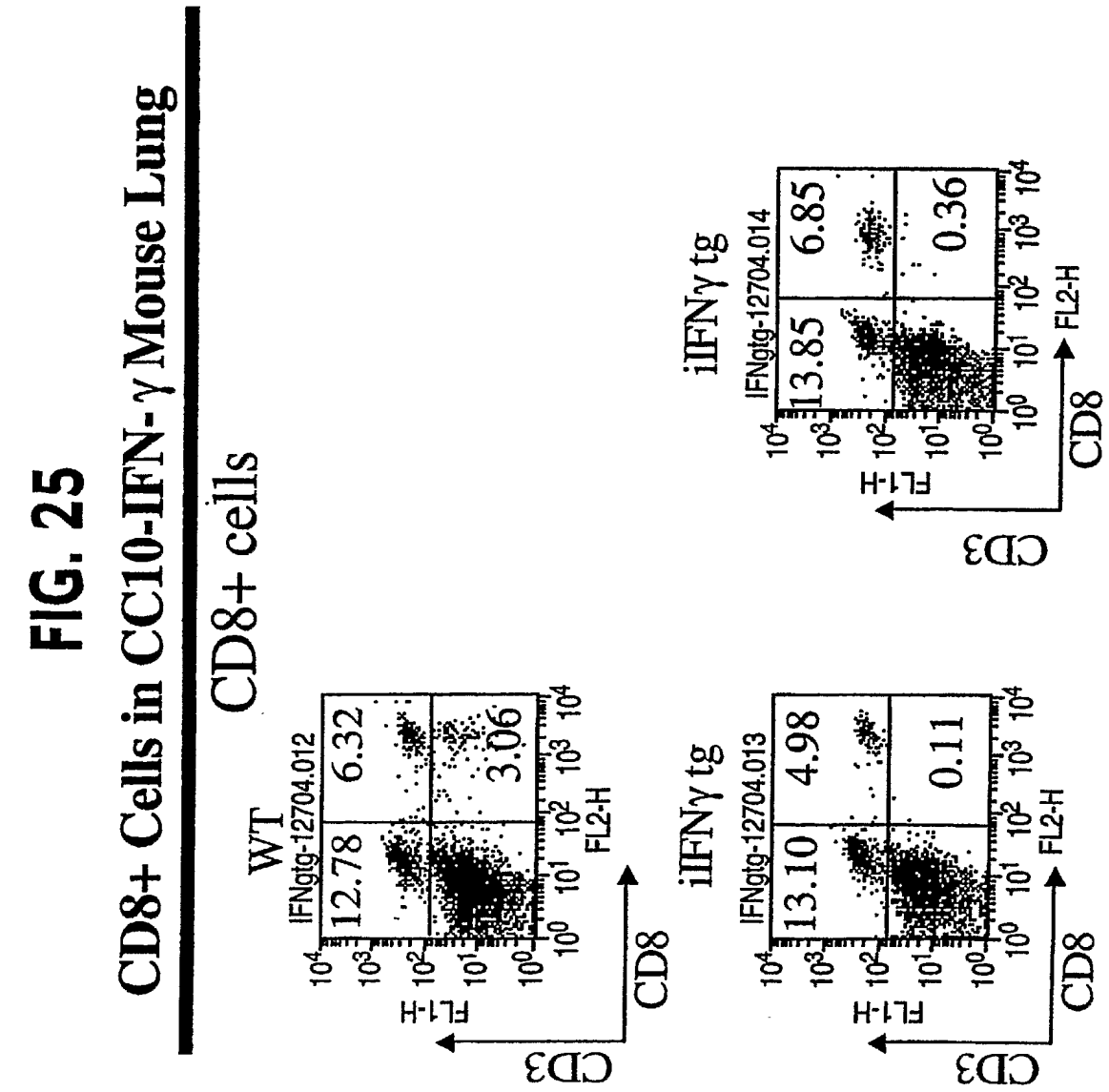

CD8+ Cells in CC10-IFN-γ Mouse Lung
CD8+ cells
WT
IFNgtg-12704.012
12.78
6.32
3.06
iIFNγ tg
IFNgtg-12704.013
13.10
4.98
0.11
iIFNγ tg
IFNgtg-12704.014
13.85
6.85
0.36
FL1-H
FL2-H
CD3
CD8

FIG. 26

NK Cells in CC10-IFN-γMouse Lung

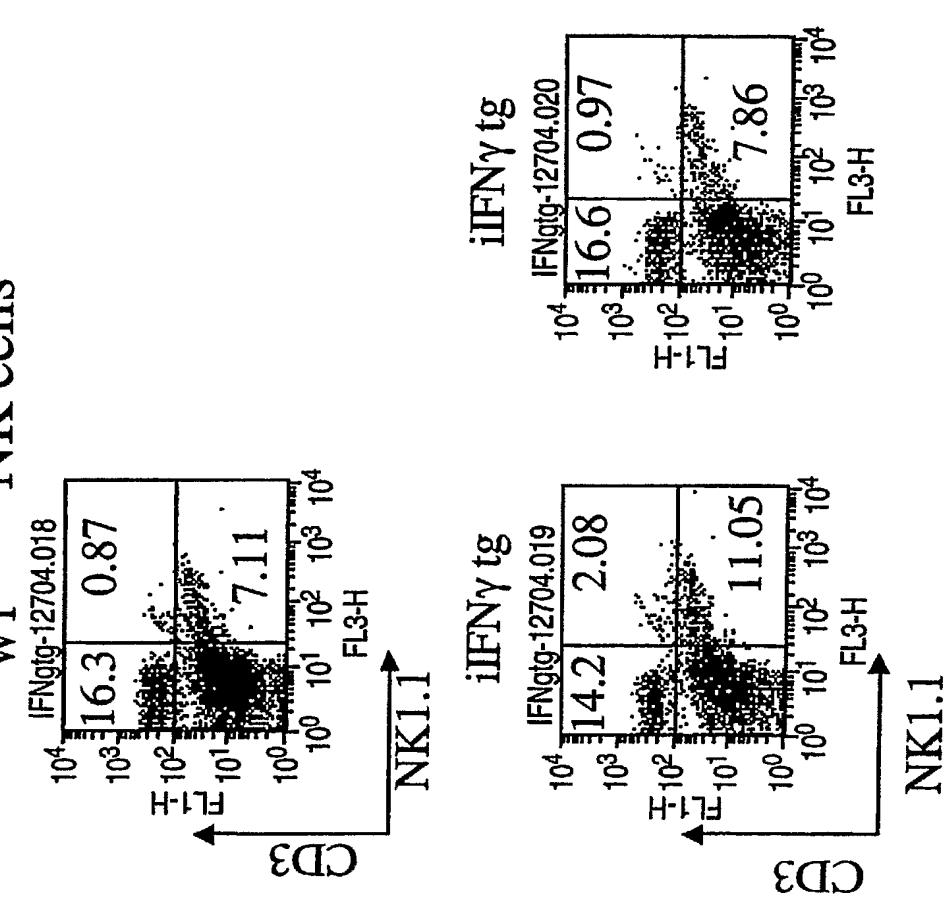
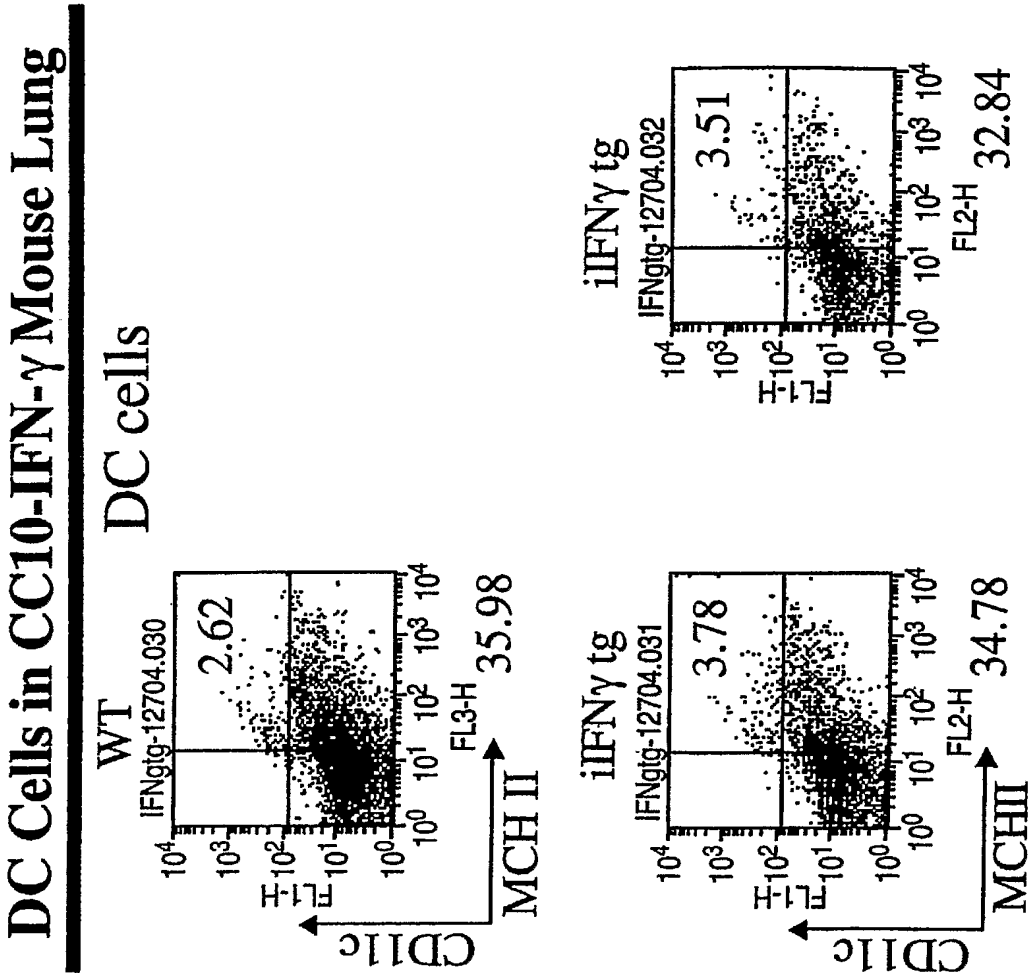


FIG. 27


DC Cells in CC10-IFN-γ Mouse Lung
DC cells
WT
IFNgtg-12704.030
2.62
35.98
CD11c
MCH II
iIFNγ tg
IFNgtg-12704.032
3.51
32.84
iIFNγ tg
IFNgtg-12704.031
3.78
34.78
CD11c
MCHII